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ENVIRONMENTAL QUALITY ELEMENT



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I. INTRODUCTION

The Environmental Quality Element contains important policies for protecting the county's natural resources and ensuring that the design of the built environment is compatible with its natural setting. This element establishes three major planning corridors in the County based upon the county's ecosystem: the City-Centered Corridor, the Inland Rural Corridor, and the Coastal Recreation Corridor (see Figure EQ-1). The environmental corridor concept is used extensively in County planning activities.

Among the County's notable environmental quality achievements are: 1) 60-acre minimum agricultural zones in the Inland Rural and Coastal Recreation Corridors; 2) coastal protection zones; 3) ridge and upland greenbelt planned district zones; 4) bayfront conservation zones; and 5) adoption of design standards for planned districts; and 6) stream conservation areas.

Public open space programs resulting from this document have reserved over 45% of the county land area for public use and environmental protection. Since the Open Space District was created by popular vote in 1972, the District has acquired over 10,000 acres of highly visible and important sensitive lands. The County has been an active participant in the development of the Point Reyes National Seashore, the Golden Gate National Recreation Area, and the State Parks program. Watershed protection programs are also based upon the policy framework of this Element.

A number of important County ordinances and programs are predicated on the policies of the Environmental Quality Element. Implementation of these policies has been largely achieved through the establishment of zoning districts which are compatible with the natural environment. The various ordinances and programs serve to protect specific resources, guide project design, and identify parcels targeted for public acquisition.

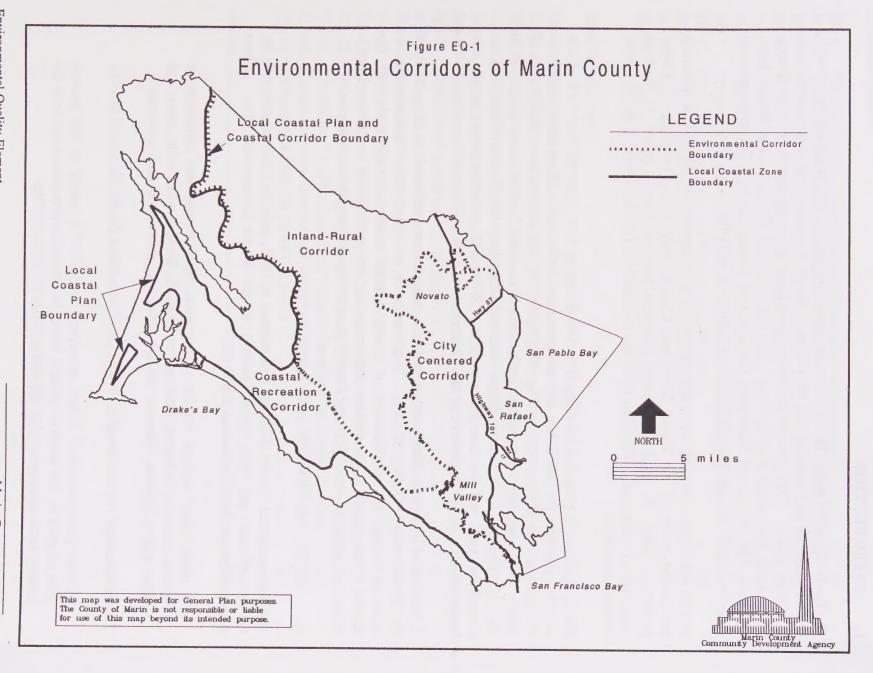
A. LEGAL AUTHORITY

The Environmental Quality Element, first adopted in 1973, satisfies State requirements for the conservation and open space elements of the Marin Countywide Plan. These requirements are found in Section 65302 (d):

A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources....

The requirements are also found in Article 10.5 Open-Space Lands, Section 65560 (a):

"Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open space plan adopted pursuant to Section 65563.



B. RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The 1973 Environmental Quality Element contained the County's policies on parks and recreation, trails, noise, seismic, flood and fire hazards, and hazardous materials. Since that time, the County Planning Department has prepared separate general plan elements with detailed policies in each of the environmental areas. Updated policies can be found in the following elements: Agriculture, Environmental Hazards, Noise, Parks and Recreation, and Trails. Detailed coastal, bayfront, and stream conservation policies were adopted in the 1982 amendments to the element.

The Environmental Quality Element is related to other elements in the following manner:

Agriculture Element: Preserves agricultural uses and open space in the Inland Rural and Coastal Recreation corridors.

Community Development Element: Discusses intensity of use in the environmental corridors and identifies land targeted for open space.

Environmental Hazards Element: Relates various environmental conditions to hazards.

Parks and Recreation Element: Provides inventory of park land.

Trails Element and Map Series: Provides inventory of trails in public open space and discusses acquisition of trails and open space.

C. RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS

Community plans and the Local Coastal Plans I and II often contain conservation or environmental quality chapters, detailing policies for localities. Technically, these plans are considered amendments to the Marin Countywide Plan.

Hazardous waste management and mitigating policies and programs are discussed in the draft County Integrated Waste Management Plan. The Plan is currently in draft form and due for completion in 1994. Although not technically a general plan document, the policies and programs in the waste management program are related to this element.

The following Environmental Quality technical reports serve as appendices to the Element:

- #1 Air Quality Maintenance
- #2 Mineral Resources Preservation Sites
- #3 Species Protection in Marin

D. ORGANIZATION OF THE ELEMENT

The Environmental Quality Element describes the three environmental corridors and explains how the environmental corridor concept is used as the basis for land use planning in Marin County. As a group, the policies and programs ensure that the County's built environment will be sensitive to the natural environment.

Objectives, policies, and implementation programs in this element are organized by environmental corridor, conservation zone, the built environment, and topics (e.g. air quality, species protection). The policies in this element protect the natural ecosystems in the three environmental corridors. Maps in this document identify ridge and upland greenbelt policy areas (Figure EQ-10), examples of areas subject to Streamside Conservation Area policies (Figure EQ-8), and Bayfront Conservation Zones (Figure EQ-9). Tables (EQ-8 through EQ-10) list open space areas acquired and targeted for acquisition.

II. EXISTING CONDITIONS

A. ENVIRONMENTAL CORRIDORS

The Countywide Plan divides Marin into three environmental corridors, each with a discrete set of open space and development issues (see Figure EQ-2). Existing conditions in the City-Centered Corridor, Inland Rural Corridor, and Coastal Recreation Corridor can be characterized as follows:

1. <u>City-Centered Corridor</u>

Most of Marin's people live here in a series of bayfront towns around inlets and peninsulas separated by ridges. Marin's eastern shoreline is the western edge of San Pablo and San Francisco Bays. These bays are part of the San Francisco Estuary which is the largest estuary on the West Coast of North and South America. Marin's wetlands and related habitats are valuable natural resources providing critical habitat for hundreds of species of fish, birds and other wildlife. The north bay is a major coastal wintering and migrational area for several endangered species, and a variety of Pacific Flyway ducks and shorebirds. In addition, the estuary's streams, tidal and seasonal wetlands improve water quality and provide flood control, open space, recreational and other benefits.

The City-Centered Corridor consists of three main environmental zones (see Figure EQ-2), and the nature of these zones affects the kind of development that is appropriate:

The bay shore, consisting of tidelands, marshes, and flat land. Some of this zone remains in its natural state, and the plan contains provisions to protect this environmentally sensitive resource.

Bayside plains, generally semi-circular, separated by ridges extending into the bay. Most of Marin's development has occurred here within Marin's cities and towns.

Bayside foothills, knolls and ridges, generally heavily wooded on the north slope and grassy on the south slope. This area has experienced development pressure, as development moves up out of the bayside plains. Ridge and Upland Greenbelt policies serve to protect these areas as a visual resource and community separator, as appropriate.

2. <u>Inland Rural Corridor</u>

Two environmental zones extend through this corridor. One is a belt of inland valleys and upland meadows, where farms, ranches, rural villages, and water reserves are located. Another is the County's central range of mountains, generally with access which is too difficult for anything but recreational uses.

Much of this corridor is subject to agricultural contracts under which owners have agreed that they will leave the land in agricultural production, in return for the County assessed value based on agricultural uses only. State law requires that areas including agricultural preserves be zoned for uses that are compatible with agriculture. The County has rezoned the rural portions of central and western Marin for agricultural purposes, with a prevailing residential density of one unit per 60 acres.

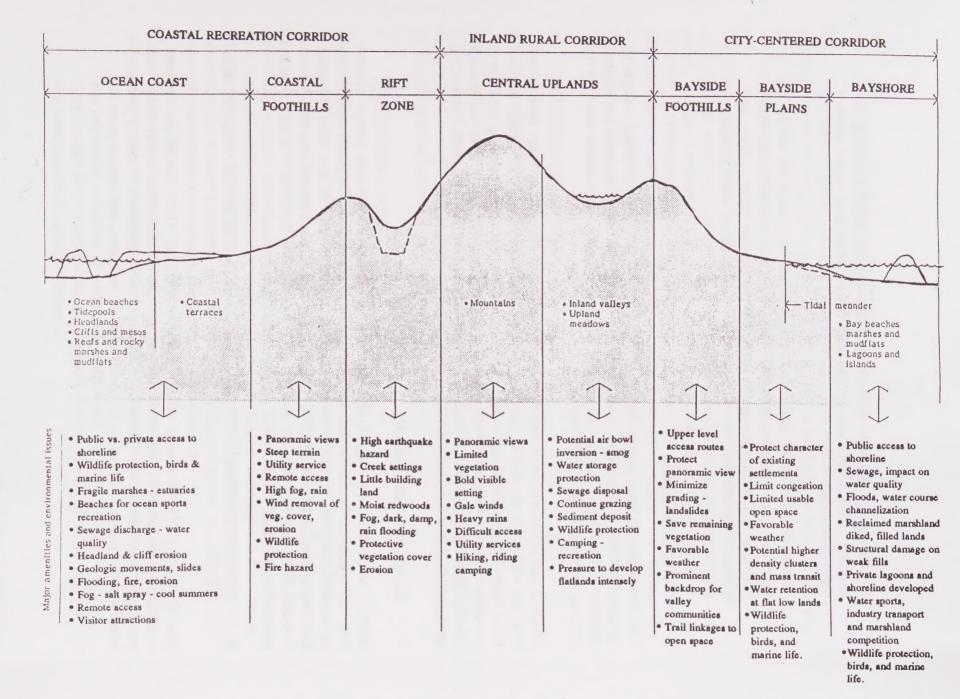
3. <u>Coastal Recreation Corridor</u>

Marin's ocean coast is a rugged, dramatic meeting of land and sea that attracts visitors from throughout the world. Much of the corridor has been acquired by public agencies for recreational purposes - Point Reyes National Seashore, the Golden Gate National Recreation Area, and the Mount Tamalpais, Stinson Beach, and Tomales Bay State Parks. Detailed findings and policies for this corridor are included in the Local Coastal Program, adopted by the Board of Supervisors and the Coastal Commission.

B. RESOURCE CONSERVATION AREAS AND RESOURCE PROTECTION ISSUES

The Countywide Plan designates specific conservation areas where special development restrictions and standards are established to prevent environmental deterioration and provide for enhancement and restoration of the physical environment. Resource protection issues are also discussed including air quality, mineral resources, and species protection.

Figure EQ-2. Typical Cross Section Through County Showing Environmental Zones



1. Stream and Creekside Conservation Zones

This zone consists of buffer zones along all natural watercourses shown as a blue line on the most recent appropriate USGS quad sheet, or supporting riparian vegetation for a length of 100 feet or more (Figure EQ-3). The zones consist of the watercourse and surrounding banks on both sides up to the high water mark and a strip of land extending laterally outward from the top of both banks, to a width of 100 feet in the Coastal Recreation and Inland Rural Corridors and to a width of 50 feet on smaller infill parcels in the City-Centered Corridor. The 100 foot buffer should be applied to large tracts of land in the City-Centered Corridor proposed for development where it is consistent with planning and environmental goals.

2. Coastal Conservation Zone

This area consists of the coastal zone along the western edge of Marin County extending inland from the shoreline 1,000 yards. The Marin County Local Coastal Plan, as approved by the California Coastal Commission, contains the plan for this area, along with policies and standards for future land use, development, and activities.

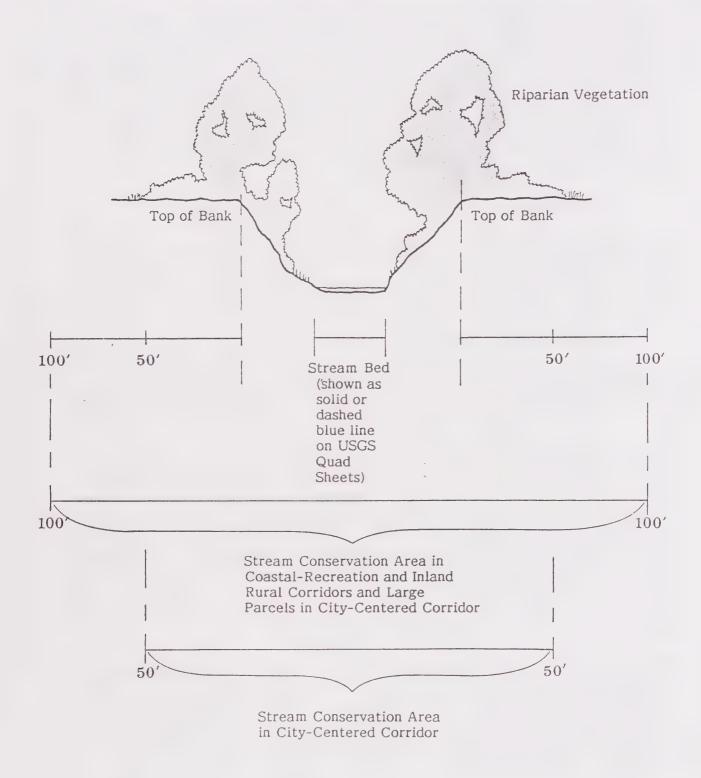
3. <u>Bayfront Conservation Zone</u>

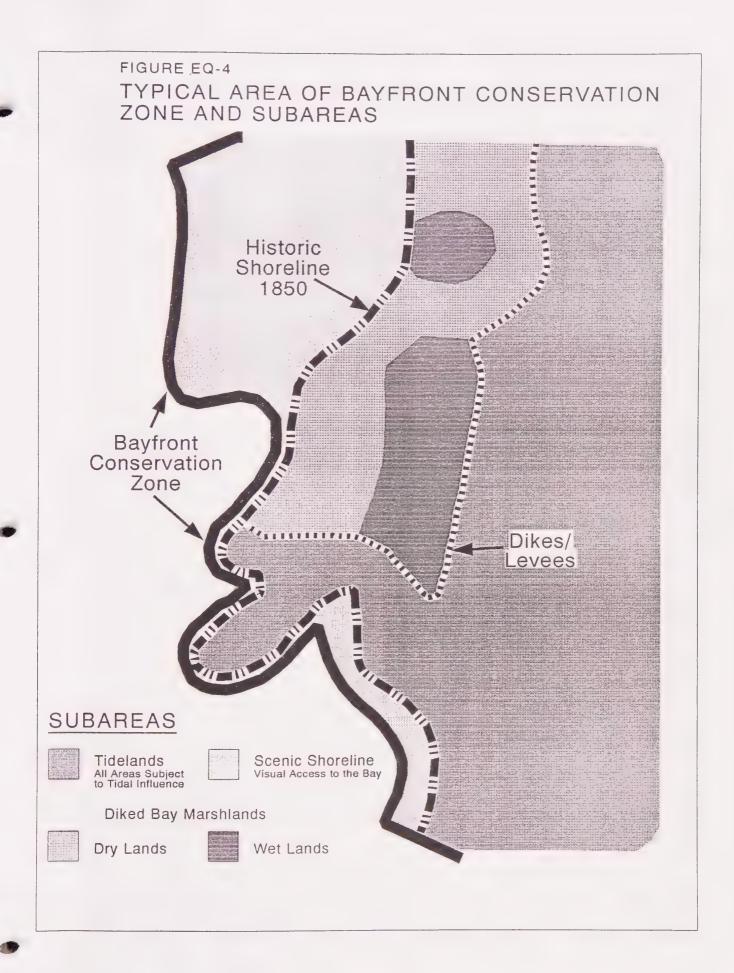
The Bayfront Conservation Zone is composed of three subzones: the tidelands subzone, the diked bay marshlands and agricultural subzone, and the shoreline subzone (see Figure EQ-4).

The *Tidelands Subzone* includes all areas subject to tidal action (including salt marshes, beaches, rocky shorelines, and mudflats) and all open water areas. It also includes all the contiguous and adjacent land up to the line of highest tidal action (as applied by BCDC in accordance with the McAteer Petris Act) and whichever of the following bounds the largest area of tidal marsh and channels: the landward dike which circumscribes tidal inflow, the nearest greater-than-50% developed urban area, or publicly maintained road. This subzone further includes a 100-foot band landward on undeveloped land, within which a flexible buffer could be delineated on a case-by-case basis. The purpose of this subzone is to define those areas which should be left in their natural state because of their biological importance to the estuarine ecosystem.

The Diked Bay Marshlands and Agricultural Subzone includes all historic bay marshlands (as determined by Nichols and Wright (1971)). The former marshlands in this subzone have been diked off from tidal action and in many cases filled or partially filled, and/or converted to agricultural uses, airports, urban development, and in a few instances lagoons with residences. Residential and industrial areas which are at least 50% developed on already filled lands may be excluded.

Figure EQ-3. Typical Cross Section of Stream Conservation Zone





The purpose of the *Diked Bay Marshlands and Agricultural Subzone* is to define those areas in which there are similar subsurface or surface conditions; areas which are close to and functionally related to tidal lands; areas in which it is possible to foster the continuation of agriculture; or, if that ceases, to consider the feasibility of returning undeveloped, unfilled former marshes to a more productive wildlife habitat by restoration. This subzone includes a 100-foot band landward on undeveloped lands, within which a flexible buffer can be delineated on a case-by-case basis.

The Shoreline Subzone includes a few shoreline areas where main public thoroughfares such as Highway 101, Paradise Drive, and San Pedro Road follow the coastline and promote visual access to the bay. The subzone extends from the bay side of the roadway to the Tidelands Subzone. The purpose of this subzone is to define a viewshed and promote conservation of coastal habitats such as bluff vegetation and wildlife nesting/resting areas.

4. Air Quality Resources

Due to favorable meteorologic conditions in Marin County, the ambient air quality is excellent. However, pollutants generated primarily through vehicle emissions in Marin are a concern and may contribute to worsening conditions in other parts of the Bay Area. Tables EQ-1 and EQ-2 report contaminant levels recorded in Marin County.

Table EQ-1. Number of Days On Which Federal or State Standards Were Exceeded at the San Rafael Monitoring Station

Pollutant	1978	1980	1982	1983-1987
Carbon Monoxide	1	0	. 0	0
Ozone (O ₃)	2	0	0	0
Nitrogen Dioxide (NO ₂)	0	0	0	0
Sulfur Dioxide (SO ₂)	0	0	0	0
Total Suspended Particles	0	0	0	0

Source: Bay Area Air Quality Management District, San Francisco, CA.

Although Federal and State Standards have rarely been exceeded (as shown in Table EQ-1), Marin County emissions do contribute to the regional ozone problem. Table EQ-2 reports the amount of pollutants actually pumped into the air in 1982 by the various county land uses.

The large increase in the number of registered vehicles in Marin County relative to the small increase in population indicates an increase in the number of vehicles per household. The increase in the number of vehicles per household and corresponding increase in traffic congestion may lead to further degradation in air quality. Transportation was the most

significant source of pollutants in the County. The County does not have any authority to regulate the number of vehicles per household, but may encourage reduction of the number of trips by providing alternative means of transportation. The Transportation Element addresses this topic in greater detail.

Table EQ-2. Marin County Emission Inventory Summary: 1982 Contaminant Levels

Contaminant in Tons Per Day						
Land Use Category	СО	03	NO ₂	SO_2	TSP	Total
Residential	3	2	1	0	0	6
Commercial	0	1	0	0	0	1
Industrial	4	4	1	0	0	9
Infrastructure	0	0	0	0	0	0
Construction	0	1	0	0	7	8
Transportation	122	14	12	1	11	160
Agriculture	0	1	0	0	5	6
Total	129	23	14	1	23	190

Source: Air Quality and Urban Development: Guidelines for Assessing Impacts of Projects and Plans. Table VI-A-1. Emission Inventory Summary: 1982 Contaminant Levels, Pg. VI-3. Bay Area Air Quality Management District, Planning Division, November 1985.

The Bay Area Air Quality Management District identifies "sensitive receptors" as facilities in which individuals are highly susceptible to the adverse effects of air pollutants. These facilities include, but are not limited to, hospitals, clinics, schools, playgrounds, child care centers, convalescent and retirement homes. Figure EQ-5 shows the location of sensitive receptor sites within unincorporated Marin County.

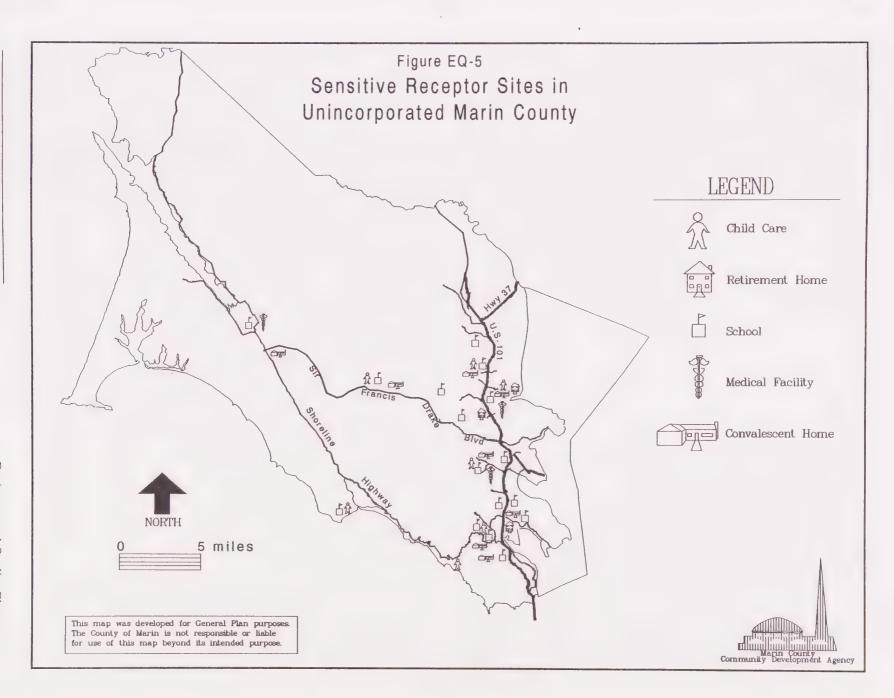
Receptor population groups include children, the elderly, the acutely ill, and the chronically ill. Individuals with cardiorespiratory diseases are the most susceptible. Due to the presence of these populations in most residential neighborhoods, these areas should be considered sensitive receptors. The proximity of some sensitive receptors to heavily traveled roads means that these populations may be exposed to higher concentrations of carbon monoxide and nitrogen dioxide, especially during and after the commute rush hours.

There are many policies in the Countywide Plan which will serve to reduce air quality impacts. Many of these are described in this Element. The Community Development

Element and the Transportation Element also contain objectives, policies, and programs which will reduce impacts (see Table EQ-3).

Table EQ-3. Air Quality Related Policies and Programs

Policy CD-2.2	Location of Housing and Jobs			
Policy CD-2.3	Location of Development in Coordination with the Transportation System			
Policy CD-2.4	Location of Commercial and Higher Intensity Residential Development			
Policy CD-2.5	Mixed Residential and Commercial Uses			
Program CD-2.5a	Identify suitable mixed use sites			
Trans	sportation Element - Air Quality Policies and Programs			
Program T-1.1d Traffic Impact Monitoring of CMP Transportation Sys				
Program T-1.1e	TSM Program and Trip Reduction Ordinance			
Program T-1.1f	Transportation System Modeling			
Program T-1.1g	Local Transit Services Plan			
Program T-1.1h	Cooperate with Countywide Planning Agency			
Objective T-5	To provide bicycle access among residential neighborhoods, employment centers, shopping areas, and recreational facilities.			
Policy T-5.1	Improve Bicycle Access			
Program T-5.1a	Create a bicycle policy map			
Program T-5.1b Use the Development Review Process to implement access				
Program T-5.1c Developers Provide Bicycle Access and Storage				
Program T-5.d	Bicycles in the Transportation System Management Program			
Policy T-5.2	Bikeways Committee			



5. Mineral Resources

The State of California Division of Mines and Geology has developed and applied a broad classification system for all mineral resources in California. This classification system has allowed the State Mining and Geology Board to "designate" certain highly valuable sites for which local general plan resource preservation policies are required. The County is required by law to respond to State directives under the Surface Mining and Reclamation Act of 1975 (SMARA).

SMARA directs local cities and counties to adopt policies to preserve and protect designated mineral resource sites from premature development or other land uses which are incompatible with mineral extraction. The State's purpose is to ensure that necessary mineral and construction commodities are located reasonably close to their markets and that the reclamation of mined lands prevents adverse effects on the environment and public health.

The State has prepared information by region on mineral deposits of statewide or regional significance. The North San Francisco Bay Production Consumption Region includes Sonoma, Marin, and Napa Counties. The Region is dependent upon both crushed stone and alluvial deposits for construction, particular asphaltic concrete, aggregate, road base or sub-base materials, and Portland Cement Concrete. Of these resources, fine sand and gravel suitable for Portland Cement Concrete appears to be the most limited in supply.

The total consumption through the year 2030 is estimated to be 478 million tons for the North Bay region. This projection was derived from consumption records and population estimates from the past 28 years. The average per capita rate per year is 8.8 tons. The per capita rate may be expected to differ if growth patterns in the North Bay charge. Unforeseen events, such as disaster reconstruction, could dramatically change the consumption pattern as well.

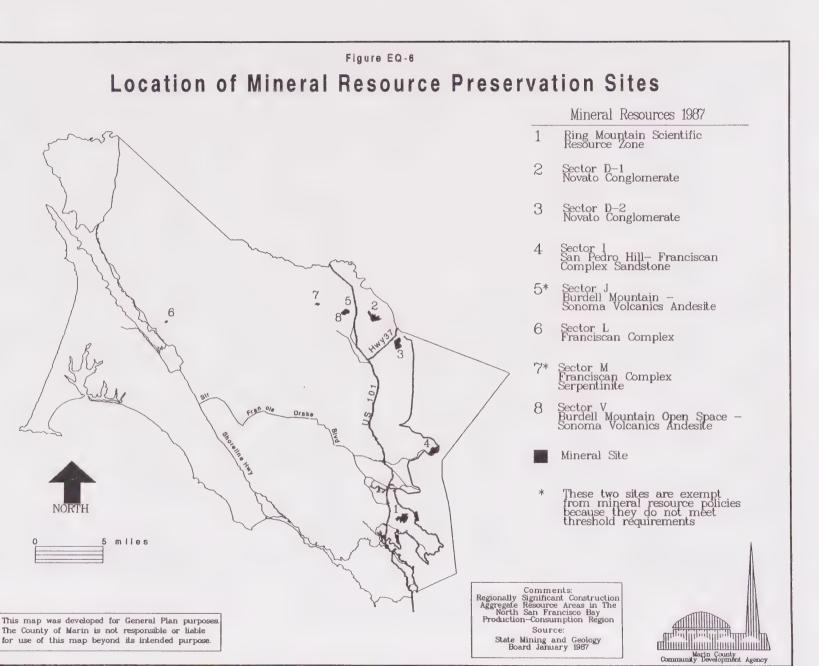
Eight sites in Marin County have been "designated" by the California State Department of Conservation Division of Mines and Geology as having significant mineral resources for the North Bay region. The sites contained deposits that were suitable as marketable commodities, and met a threshold value defined as a gross selling price of at least \$5 million in 1978 dollars (Figure EQ-6). Two of the eight sites have been exempted since they no longer contain sufficient resources to meet thresholds of regional significance. Five of the sites designated in Marin County have been identified as Mineral Resource Zones, Class 2, or MRZ-2. MRZ-2 lands contain:

- a deposit composed of material that is suitable as a marketable commodity; and,
- a deposit which meets a threshold value defined as a gross selling price of at least \$5 million in 1978 dollars.

The eighth site, Ring Mountain, is considered to be a Scientific Resource Zone (SZ) rather than a production site due to the rare geologic formations found there. All sites are shown on Figure EQ-6.

The eight sites include:

- Site #1. Ring Mountain, Tiburon. This 190 acre site is located at the base of the Tiburon Peninsula and would be precluded from further development as a result of these policies. It contains rare, colorful and enigmatic metamorphic rock as well as many species of rare plants.
- Site #2. Novato Conglomerate-Black Point (Sector D). The site is located within the city limits of Novato and contains a thick accumulation of well-rounded pebbles, cobbles, and boulders in a well-cemented sandy matrix suitable for Portland Concrete Cement. It is calculated to have 18.47 million tons and is currently owned by Debra Homes Inc., Novato Horsemen, and Valley Memorial Park. It would be subject to mineral resource policies in the Novato General Plan only.
- Site #3. Novato Conglomerate-Black Point (Sector D-2). This site is located at the Renaissance Faire/Living History Centre and was once quarried for the conglomerate it contains. It is estimated to have 10.64 million tons. It is subject to mineral resource policies in the Novato General Plan only.
- Site #4. Franciscan Complex Sandstone-San Pedro Hill (Sector I). The site is located at the tip of the San Pedro Peninsula just outside San Rafael city limits and has been mined since the turn of the century. PCC aggregate, rip rap, and shale have been quarried over the years, supplying materials for bricks, tile, and lightweight aggregate. A reclamation plan was filed in 1976 and amended in 1982. San Rafael's policies for the reclamation of the site are expressed in the City's Peacock Gap Neighborhood Plan.
- Site #5. Sonoma Volcanics Andesite-Burdell Mountain (Sector J). The 50-acre site is located on the east side of Mount Burdell and contains a large block of andesite suitable for asphaltic concrete aggregate or road base material. The presence of sufficient andesite was disputed by the owner, Mt. Burdell Partners, who presented a study by a qualified geologist confirming that most of this material had already been extracted over a 20-year period ending in 1977. The State Division of Mines and Geology confirmed in their letter of April 20, 1988, that this site no longer contains sufficient mineral resources to meet the threshold requirement for a regionally significant deposit. The Board of Supervisors has exempted this site from the application of Mineral Resource Preservation Policies.



- Site #6. Franciscan Complex-Borello Quarry (Sector L). The site is located 3.5 miles north of Point Reyes Station and contains sandstone, shale, greenstone, chert, and pillow lavas. Greenstone and pillow lavas are mined and sold for road base material and drain rock.
- Site #7. Franciscan Complex Serpentinite-Ghilotti Quarry (Sector M). Located on the southwest slope of Burdell Mountain and 3 miles northwest of downtown Novato, this site contains serpentinite, dark green to grayish-green in color, suitable for subbase material after crushing. The State Division of Mines and Geology confirmed in their letter of April 20, 1988, that this site no longer contains sufficient mineral resources to meet the threshold requirement for a regionally significant deposit. The Board of Supervisors has exempted this site from the application of Mineral Resource Preservation Policies.
- Site #8. Sonoma Volcanics Andesite-Burdell Mountain Open Space Preserve (Sector V). Adjacent to Sector J., this site also contains hard, dense andesite suitable for asphaltic concrete aggregate. It is owned by the Marin County Open Space District and located within Novato city limits. It is a management policy of the District to prohibit the collection or exploitation of minerals from its lands as these activities are incompatible with the Open Space use of the land.

The policies in this Element serve to protect the above listed mineral resource sites from untimely development and incompatible land uses while ensuring that all mining operations provide adequate reclamation plans. Implementation measures would apply a new overlay zone "Designated Mineral Resource" to the identified sites in unincorporated Marin County.

The overlay zone would prohibit any temporary or permanent land uses which would preclude eventual extraction of the mineral resource and would require the creation of buffer zones between the potential extraction sites and surrounding areas. Notice would be recorded on property titles identifying the presence of important mineral resources. Implementation would also include amendments to Chapter 23.06 of the Marin County Code to require quarry permit applications to report how nuisances, hazards, and adverse environmental impacts created by the mining operation would be mitigated. Such mitigation would include the protection of wetlands and the reduction of negative visual impacts. All new quarry permit applications would be subject to an Initial Study to determine if an Environmental Impact Report should be required.

Once a site is mined and satisfactory evidence is presented to the Community Development Agency that it no longer contains the threshold amount of mineral resource, the County shall institute action to remove the site from the application of its Mineral Resource Preservation Policies.

6. Species Protection

The lands in Marin provide habitat for a rich variety of plants and animals. Eleven major biotic communities exist in Marin County and each community provides habitat for a distinct grouping of plant and animal species (see Technical Report #3, Species Protection in Marin, for greater detail). However, several species of plants and animals and some natural communities in Marin County are becoming increasingly rare, due to changes in the landscape caused by human activities. Both Federal and State governments have adopted laws to protect species threatened with extinction. In order to comply with these laws, local planning agencies must ensure that development and other human activities do not adversely impact endangered species, or the habitat upon which they depend for survival. Through the development review process, the County seeks to protect the natural habitat from detrimental human activity.

The California Department of Fish and Game has developed a classification of "special status species," which recognizes the need to protect plants and animals of concern other than those classified as endangered, threatened, or candidate for endangered or threatened status. Special status species fall under one or more of the following categories:

- 1) Officially listed or proposed for listing under the State of California and/or the Federal Endangered Species Acts;
- 2) State of California or Federal candidate species for possible listing;
- 3) A California Department of Fish and Game Species of Special Concern;
- 4) Species that may be considered endangered or rare under Section 15380(d) of the CEQA guidelines;
- 5) A Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service Sensitive Species;
- 6) Species listed in the California Native Plants Society's <u>Inventory of Rare and Endangered Vascular Plants of California</u>;
- 7) Species that are biologically rare, very restricted in distribution, or declining throughout their range, but are not currently threatened with extirpation;
- 8) Population(s) of species in California that may be peripheral to the major portion of a species' range but are threatened with extirpation in Marin County or in the State of California;

9) Species closely associated with a habitat that is declining in California at an alarming rate (e.g. wetlands, riparian, old growth forests, native grasslands, valley shrubland habitats, vernal pools, etc.).

Indiscriminate development can destroy whole habitats or lead to isolated patches of habitats. If these patches are too small in area, they may not be able to support the organisms that would ordinarily live there. Edges between habitats can be particularly rich in wildlife and often serve as distinct habitats, supporting edge-dependent species.

Preserving habitat diversity is the most effective method for preserving plant and animal diversity. For this reason, specific development proposals must be reviewed in terms of their overall impact on habitat diversity. This element contains policies which serve as the basis for development review criteria that preserve native species, or protect the native environment, and discourage aggressive, exotic species.

7. Timber Production

State law requires that the general plan designates parcels zoned for timberland production. However, no lands are zoned for timber production in Marin County.

C. THE BUILT ENVIRONMENT

1. Visual Resources and Community Character

The built environment in Marin County is generally suburban in character, with low-density and low-rise development. The City-Centered Corridor adjacent to Highway 101 contains 97.5% (23,019,926 square feet) of all commercial and industrial space in the County and approximately 88% of the housing stock. Although historic downtown districts exist in many Marin cities and coastal towns, the majority of structures were constructed in the post-World War II era and most of the residential subdivisions in the City-Centered Corridor were built in the 1960s and 1970s.

Views toward the ridges and shorelines from Highway 101 and connecting arterials have become a matter of community concern. Prior to the 1973 Countywide Plan, many community members were concerned that commercial and residential uses along Highway 101 would obstruct views to the County's natural features and create a canyon effect for commuters. The quality of the built environment and its impact on the natural environment were recognized in the 1971 planning document "Can the Last Place Last?," which laid the conceptual groundwork for a series of general policies that were adopted into the 1973 Countywide Plan. Design standards for the built environment were established in response to concerns about obstructed view corridors from Highway 101.

As a package, the policies spell out a program to protect biological systems while minimizing resource consumption and creating functional, safe, and aesthetically desirable

man-made environments. The intention of these design standards is to complement the open space acquisition program and to protect the natural environment whenever possible.

2. <u>Electromagnetic Fields</u>

The proximity of development (and subsequent exposure) to electromagnetic fields has been the cause of recent concern and is the subject of several new studies. The studies which have been done to date do not provide sufficient background and data upon which to base specific setback recommendations. Scientists differ in opinion about the extent of the hazard, and there is no definition of a "safe level." These uncertainties must be resolved before specific public policy can be developed.

There two basic methods for reducing exposure to electromagnetic fields. The first involves engineering solutions which utilize various configurations to "balance" the lines and reduce the electromagnetic field. On-going research projects are likely to produce additional engineering solutions. The other method to reduce exposure is to require setbacks. Although useful, setbacks do not reduce the electromagnetic field, and establishing criteria for specific setbacks may be extremely difficult given the lack of information available.

Despite the lack of data, general policies in the plan can serve to alert people to the potential effects of electromagnetic fields and require additional site specific analysis when development is proposed.

3. Archaeology and Historic Preservation

Marin County has abundant archaeological and historical resources. The County was inhabited by the Coast Miwok tribe at the time of Euro-American contact. Nearly 100 archaeological sites have been investigated since the late 1940s, although less than five percent of the total land area in the county has been surveyed for archaeological importance. The majority of prehistoric archaeological sites have been identified along the historical margins of the bay shore, at the base of hills, and on midslope terraces along watercourses.

Evidence of the Coast Miwok tribe is preserved in several locations throughout the county, including Point Reyes National Seashore and Olompali State Park. It is likely that numerous sites remain undiscovered. Archeological sites throughout the county should remain undisturbed and possible sites should be examined prior to development. Policies in this element require that the design and siting of development avoid interfering with archaeological resources. Policies also require that local organizations (such as the Federated Coast Miwok) be consulted during review of development applications which have the potential to impact these important archeologic resources.

Early settlement patterns are still visible in many Marin County communities. The county also has a number of historically significant areas and structures. These historical resources are protected through several mechanisms including enforcement of the Marin

County Code (Title 22) which limits alterations to structures built prior to 1930. The Local Coastal Program Historic Study (1981) provides guidelines for historic preservation of these structures, in addition to studies done for specific communities. Historic preservation serves an important cultural function in retaining the heritage and value of an evolving society.

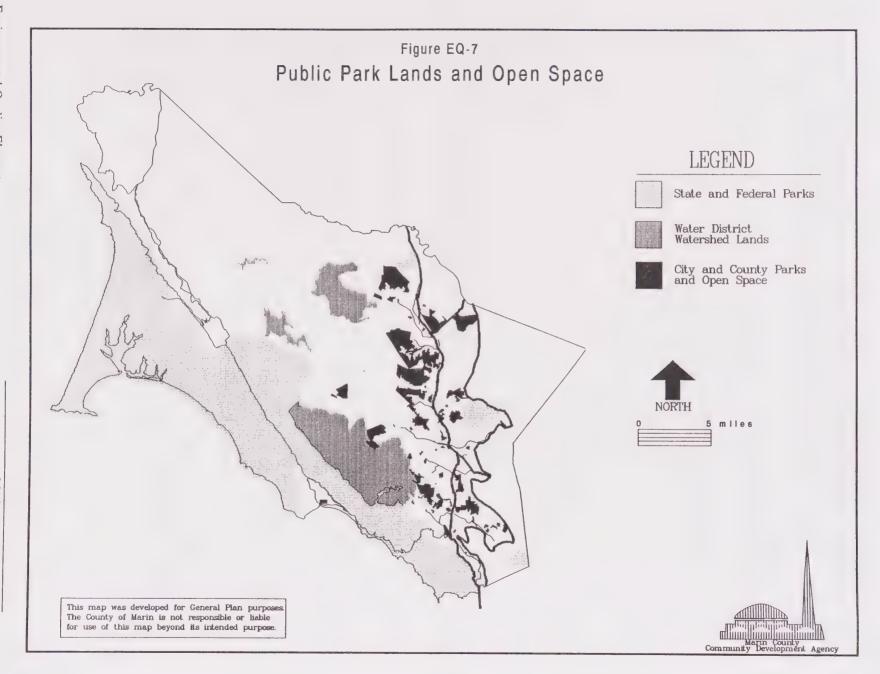
D. OPEN SPACE

Prior to World War II, agriculture was the dominant land use in Marin County. After the war, suburban growth consumed numerous farmlands along Highway 101 while a strong land conservation movement helped secure public open space for recreational use, including Samuel P. Taylor State Park, Mount Tamalpais State Park, and the Marin Municipal Water District watershed lands (see Figure EQ-7).

In the 1960s, several important events continued to shape both agriculture and open space in Marin: 1) the Federal Government purchased 71,000 acres of coastal land to create Point Reyes National Seashore; 2) Caltrans proposed a new east-west freeway connecting the Richmond Bridge to Point Reyes Station (Route 17) which met with severe local opposition and was abandoned; and, 3) the State passed the Williamson Act which offered lower property taxes on qualifying agricultural lands in exchange for continued agricultural use of those lands. In light of these factors, the County revised its land use policy for West Marin in 1971. The 1971 revision encouraged recreation in West Marin and supported agriculture by implementing minimum 60-acre lot zoning.

In 1972, Marin County voters approved ballot Measure A, authorizing formation of the Marin County Open Space District and the assessment of a property tax for the purpose of acquiring and managing open space in Marin County. In 1973, the County adopted the first Environmental Quality Element which established target areas for purchase with Open Space District revenues. The priorities for purchase within the target areas are revised annually by the Open Space District Board. Because development pressures are strongest within the City-Centered Corridor, this corridor has historically been the focus of the District's preservation activities. The Open Space District has also acquired important ridgelines and scenic areas in the Inland Rural Corridor, as well as environmentally sensitive parcels in the Coastal Recreation Corridor.

Working cooperatively, the Open Space District, the State of California Parks Department, the Federal Government, and local communities have achieved 56% of the open space acquisition target for the City-Centered Corridor set in the previous Countywide Plan. This represents a total of 16,041 acres.



The Open Space District often leverages public funds by coordinating its activities, such as land purchases, with other government and non-profit programs. Only 28% of the District land acquisition costs have involved sole acquisitions by the District. Conversely, the Open Space District has contributed funding and staff time to three major projects of statewide significance: San Pablo Bay State Wildlife Area, China Camp State Park, and Rancho Olompali State Park. The District's budget includes the cost of land acquisition and land management. Land acquisition costs include the purchase price of a property or properties, as well as expenses for appraisals, title work, surveys, legal descriptions, and deed review.

The Open Space District's land management responsibilities include erosion control, protective road grading, tree pruning, gate and fence construction, security patrol, drainage maintenance, species management, fire protection, parking, signage, and trails construction. Unlike County departments, which are funded through general County revenues, the District does not compete in the County budget process. District funds accumulate annually until used for long-term property purchases. Between 85% and 90% of the District's funds are derived from local property taxes, and State and Federal monies provide very little of the District's funds.

The County's open space preservation efforts have realized considerable benefit from Proposition 70, the California Wildlife, Coastal & Parkland Conservation Bond Act, passed in June of 1988. Proposition 70 provides a \$776 million State bond that includes grants for Marin County's open space program, conservation of the North Ridge of Mount Tamalpais, and West Marin agricultural preservation. The Poard of Supervisors has designated the Marin Agricultural Land Trust as administrator of the agricultural preservation program.

Table EQ-4. Public Lands and Contract Restricted Lands

Category	Subtotal	Total	% of County
Public Lands		152,797	39.3
Federal Parks	92,538		
State Parks	12,853		
Local Parks	2,115		
Marin Watershed	22,731		
County Open Space	12,560		
Tidelands, Marshes, Mudflats	10,000		
Water Area		55,424	14.3
Contract Restricted		93,093	24.0
Agricultural Preserves	90,736		
Open Space Preserves	2,357		
All Other Land Uses		87,038	22.4
Total Acreage in the County		388,352	100.0

Source: Marin County Assessor, September 30, 1987.

Acquisitions by the Federal and State governments and the Marin Municipal Water District (MMWD) have helped the County achieve its open space acquisition targets. The Federal Government's acquisitions at Point Reyes National Seashore and the Golden Gate National Recreation Area (GGNRA) have contributed to County open space targets in the Inland Rural Corridor and Coastal Recreation Corridors. The State has contributed to open space targets in the Inland Rural Corridor through its expansion of the Samuel P. Taylor Park and by securing the historic Rancho Olompali Park. The MMWD owns the Soulajule Reservoir and has expanded its lands around the Nicasio Reservoir in the Inland Rural Corridor. Although the targets for these corridors have been exceeded in terms of total acreage (see Tables EQ-9 and EQ-10), a number of stream course buffers and conservation areas have not yet been acquired. Within the boundaries of the GGNRA and Point Reyes National Seashore are privately owned parcels of land, commonly referred to as "inholdings." Eventually, these lands will be acquired by the National Park Service. In terms of land use, the Assessor reports that publicly owned lands constitute almost 40% of the total acreage of the County. As shown in Table EQ-4, an additional 24% of the County land is restricted by agricultural and open space contract.

III. OBJECTIVES, POLICIES AND IMPLEMENTATION PROGRAMS

A. ENVIRONMENTAL CORRIDORS

Objective EQ-1. <u>Environmental Corridors</u>. To establish a broad land management framework derived from the County's natural environmental zones as a basis for local policies and regulation.

Policy EQ-1.1

Land Use of the City-Centered Corridor. Urban development will be concentrated in the City-Centered Corridor where infrastructure and facilities can be made available to serve urban development. Although urban development is generally concentrated within this corridor, areas within the corridor are designated for resource protection. These areas include the Ridge and Upland Greenbelt Area, the Streamside Conservation Area, and the Bayfront Conservation Zone.

Policy EQ-1.2

Land Use of the Inland Rural Corridor. Agricultural land uses will be emphasized in the Inland Rural Corridor along with other uses that are compatible with agriculture and enhance agricultural preservation in a significant way such as resource and habitat preservation. Existing communities shall be preserved.

Policy EO-1.3

Land Use of the Coastal Recreation Corridor. Open space, recreational, and agricultural land uses will be emphasized in the Coastal Recreation Corridor along with the preservation of existing coastal communities.

B. RESOURCE CONSERVATION AREAS

Objective EQ-2. Resource Conservation Areas. To identify and conserve specific resources through General Plan policies based upon important environmental factors in Marin County as well as to preserve, protect, and enhance existing species and habitat diversity in Marin County.

(Note: The following policies apply only in the unincorporated portions of the County. Cities and towns with similar environmentally sensitive areas should prepare their own conservation guidelines, or adopt the County's as appropriate. In addition, cities and towns should adopt appropriate ordinances to implement these guidelines.)

1. Stream and Creekside Conservation Areas

a. General Policies

Policy EQ-2.1

Value of Riparian Systems. Riparian systems, streams and their riparian and woodland habitat are irreplaceable and should be officially recognized and protected as essential environmental resources, because of their values for erosion control, water quality, fish and wildlife, aesthetics, recreation, and the health of human communities.

Policy EQ-2.2

Streams Defined as Blue Lines on USGS Quad Maps. All perennial and intermittent streams, which are defined as natural watercourses shown as solid or dashed blue lines on the most recent appropriate USGS quad sheet, should be subject to these stream and creekside protection policies. A perennial stream is further defined as:

a watercourse that flows throughout the year (except for infrequent or extended periods of drought), although surface water flow may be temporarily discontinuous in some reaches of the channel such as between pools.

An intermittent stream is further defined as:

a watercourse that flows during the wet season, continues to flow after the period of precipitation, and ceases surface flow during at least part of the dry season.

An ephemeral stream should be subject to these policies if it supports riparian vegetation for a length of 100 feet or more. An ephemeral stream which does not support vegetation for 100 feet or more may also be subject to the SCA policies if it is demonstrated that the stream has value for flood control, water quality, or habitat which supports rare, endangered, or migratory species. An ephemeral stream is defined as:

a watercourse which carries only surface runoff and flows during and immediately after periods of precipitation.

Policy EQ-2.3

Definition of Stream Conservation Areas. A Stream Conservation Area (SCA) should be designated along all natural watercourses shown as a solid or dashed blue line on the most recent appropriate USGS quad sheet, or along all watercourses supporting riparian vegetation for a length of 100 feet or more.

The zones consist of the watercourse itself between the tops of the banks and a strip of land extending laterally outward from the top of both banks, to a width of 100 feet on each side in the Coastal Recreation and Inland Rural Corridors and to a width of 50 feet on each side in the City-Centered Corridor on smaller infill lots. Where large tracts of land in the City-Centered Corridor are proposed for development, the 100-foot buffer should be applied, where consistent with legal requirements, and other planning and environmental goals. In the Coastal Recreation and Inland Rural Corridors, the zone should be extended if necessary to include an area 50 feet landward from the edge of riparian vegetation.

Program EQ-2.3a

<u>Protection of Stream Conservation Area.</u> The County shall implement the policies for Stream Conservation Areas through its established permit review processes and/or through adoption of specific new ordinances. When a development permit is applied for, staff will determine whether the proposed development falls within the zone, generally 100 feet from the banks of streams (50 feet from the banks of streams in the City-Centered Corridor). If the project is in this zone, staff will determine whether the proposed use is permitted by right under the Stream Conservation policies, as well as by the underlying zoning.

If the proposed use is not a permitted use in Policy EQ-2.4 and it is not a prohibited use in Policy EQ-2.5 of Stream Conservation policies, but it is allowed under the zoning, the applicant may apply for a development permit. In order for such a permit to be issued for an existing parcel, it should be determined that the parcel either:

- 1) Falls entirely within the Stream Conservation Area; or
- 2) Development on any other portion of the parcel (outside the SCZ) would have greater impacts on water quality.

If the proposal involves the creation of a new parcel, any needed modifications should be made to assure that no development occurs within the Conservation Area to the extent possible.

Applicants shall be required to submit adequate information to determine whether the Stream Conservation Area policies are being met. All development permit applications shall be reviewed for conformity with these policies, and in accordance with the California Environmental Quality Act. Proposals which do not conform to Stream Conservation policies, and which

cannot be modified or mitigated so that they do conform, shall be denied. Information on 100-year floodplains should be made available for public and staff reference and shall be incorporated into all planning reviews.

Program EQ-2.3b

Establish a Fund to Fence Sensitive Stream Areas. The County should explore the feasibility of creating a fund, established in conjunction with the Resource Conservation District and the Soil Conservation Service, and other relevant agencies, to pay the cost of fencing sensitive streamside areas (on private property) which could be impacted by cattle grazing.

Policy EQ-2.4

Land uses in Stream Conservation Areas (SCAs). The following uses are permitted in the SCA by development permits, provided these uses are allowed by the underlying zoning:

- all currently existing structures and uses including reconstruction and repairs
- · necessary water supply projects
- flood control projects
- projects to improve fish and wildlife habitat
- · grazing of livestock and other agricultural uses
- maintenance of water channels for erosion control and other purposes
- road and utility line crossings
- water monitoring installations
- trails

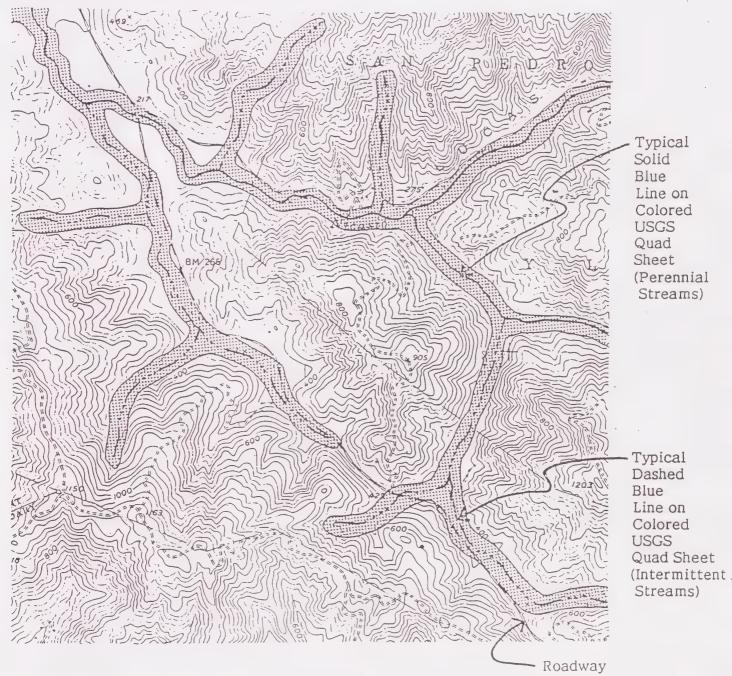
Policy EQ-2.5

Prohibited Land Uses in Stream Conservation Areas. The following new uses are prohibited in the SCA:

- roads and utility lines, except at crossings
- confinement of livestock
- dumping or disposal of refuse
- use of motorized recreational vehicles
- any structural improvement (excluding repairs) other than those identified in Policy EQ-2.4, including residences, barns, and storage buildings, unless allowed by a development permit in Policy EQ-2.6.

Figure EQ-8. Example of Areas Subject to Stream Conservation Area Policies

Portion of San Geronimo USGS Quad Sheet



Probable Stream Conservation Buffer Area: (100 feet from top of stream bank)

Policy EQ-2.6

Other Allowable Land Uses in the Stream Conservation Areas. Other uses may be allowed in the SCA by development permit, provided these uses conform to all other policies for SCAs and are:

- allowed by the underlying zoning
- on existing parcels that fall entirely within the zone
- on existing parcels where it can be conclusively demonstrated that development on any other part of the parcel would have a more adverse effect on water quality or other environmental impacts.

Policy EQ-2.7

Consideration of Costs. All concerned agencies should take aesthetic, scenic, environmental, and recreational benefits into full consideration when computing costs of alternatives for modifications of streams (applicants will be required to obtain a Streambed Alteration Agreement from the State Department of Fish and Game).

b. Preservation of Existing and Native Vegetation Policies

Policy EQ-2.8

Retention of the Natural Vegetation. The retention of the natural vegetation in an SCA should be encouraged in order to realize benefits such as soil erosion prevention, stream, shade, etc. When vegetation must be removed and soil disturbed within the SCA, or when vegetation has been destroyed or eliminated, the area should be re-seeded or replanted with native plants of the habitat as soon as possible. Broom and other aggressive exotic plants should be removed and replaced with native plants.

Policy EQ-2.9

Minimal Disturbance of Vegetation. Disturbance of vegetation within the SCA should be minimized or avoided whenever possible. Minimizing or avoiding disturbance of streamside vegetation is particularly important for trees and shrubs which provide shade, stability for the streambank, and wildlife habitat. Vegetation may partially block streams creating a ponding effect which may be beneficial fish habitat. Tree growth may be cleared from the stream channel when it unduly restricts flood flows, to protect health, safety, and welfare.

Policy EQ-2.10

Tree and Shrub Plantings. Trees and shrubs to be planted along watercourses should include a variety of species that would naturally grow in or near the creek. In general, the planting of exotic trees should be avoided. When removal of riparian vegetation is unavoidable, and mitigation is required, replacement

should be at a 2:1 ratio, whenever feasible. Enhancement and restoration of culverted streams is encouraged, whenever feasible.

Policy EQ-2.11

Modification of Natural Channels. Modification of natural channels within SCAs for flood control, etc., should be done in a manner that retains and protects the vegetation forming ground cover and shade. Special attention should be given to the protection of riparian vegetation.

Policy EQ-2.12

Protection of Riparian Vegetation. At the time of a site specific development application, the County shall evaluate impacts on riparian vegetation, when the riparian vegetation extends beyond the Streamside Conservation Zone, and incorporate measures to protect the riparian vegetation into the project design.

c. Fish and Wildlife Protection and Enhancement Policies

Policy EQ-2.13

Importance of Stream Conservation Areas (SCAs) to Wildlife Habitat. SCAs are the most important land areas for wildlife, possessing greater numbers and variety than any other area. The value of SCAs for this purpose is therefore recognized. Fishery resources are directly dependent upon the protection of SCAs to provide quality aquatic habitats.

It is important that the wildlife habitat areas in streamside communities be permanently maintained and enhanced. Human use of these areas should be restricted as necessary to protect these communities. However, designation of SCAs shall not in any manner authorize trespass upon private property, or increase the right of public agencies to gain access to private property.

Policy EQ-2.14

Monitoring Stream Conservation Areas. A system of monitoring SCAs should be established to assure the protection of vegetation, soils, water quality, and wildlife habitat along streams.

Policy EQ-2.15

Stream Alterations. Before any stream alterations are permitted, the minimum water flows necessary to protect fish habitats, water quality, riparian vegetation, groundwater recharge areas, and downstream users should be determined in conjunction with the State Department of Fish and Game and the Division of Water Rights of the State Water Resources Control Board.

Policy EQ-2.16

Modification and Mitigation of Development Within Stream Conservation Areas. When a fish or other wildlife resource may be substantially affected by development in this zone, modifications and mitigation should be required in the project, to be determined in consultation with the State Department of Fish and Game.

Policy EQ-2.17

Stream Management Programs. Projects and stream management programs which improve the opportunity for fishing and enhance the abundance of sport fish should be encouraged and supported.

d. Erosion Control Policies

Policy EQ-2.18

Soil Disturbance. Soil disturbance should be discouraged within the SCA. Where absolutely necessary it should be limited to the smallest surface area and volume of soil possible and for the shortest practical length of time.

Policy EQ-2.19

Surface Runoff. Surface runoff rates in excess of predevelopment levels should not be allowed where a new problem will be created or where the runoff will exacerbate an existing problem.

Policy EQ-2.20

Retention of Sediment. On-site facilities for the retention of sediments or contribution toward regional sediment control measures produced by development should be provided during construction and, if necessary, upon project completion. Continued maintenance of these facilities should be required.

Policy EQ-2.21

Roads, Road Spoils, and Roadfill Slopes. New roads and roadfill slopes should be located outside the SCA, except at stream crossings. No spoil from road construction should be deposited within the SCA. At road crossings in the SCAs, special effort should be taken to stabilize soil surfaces.

Policy EQ-2.22

Altering Stream Flow, Bed, or Banks. Filling, grading, excavating, obstructing flow, or altering the bed or banks of the stream channel and riparian system shall be discouraged. Such activity will only be allowed after completion of environmental review, identification of appropriate mitigation measures, and issuance of a permit by the Department of Public Works.

Policy EQ-2.23

Seasonal Development Factors. Development work adjacent to and affecting SCAs should be done during the dry season only,

except for emergency repairs. Disturbed surfaces should be stabilized and replanted, and areas where woody vegetation has been removed should be replanted with suitable species before the beginning of the rainy season.

e. Use and Aesthetics Policies

Policy EQ-2.24

Enhancement of Stream Conservation Areas. Uses and development within SCAs should enhance the appearance of the streamside environment and protect native vegetation. Through careful site analysis and development, views should be preserved and the integrity of the streamside environment should be protected. The County should work in close cooperation with the flood control districts, water districts, and wildlife agencies in the design and choice of materials for construction and alterations within the SCAs.

Policy EQ-2.25

Public Access to Stream Conservation Areas. Access to publicly owned lands within the SCA should be encouraged and improved where feasible by means of pathways, access points, and bridges. Public access should respect and enhance the environment and will not be allowed if access will destroy or degrade the riparian habitat. Trails should be situated at an adequate distance from the stream course to afford protection of wildlife corridors. Trails may occasionally diverge to the creek to provide visual access. Public lands should be added adjacent to streams where possible to make resources more accessible and usable for passive recreation and to protect and enhance streamside habitat.

Policy EQ-2.26

Restoration of Damaged Portions of Stream Conservation Areas. Damaged portions of SCAs should, wherever possible, be restored to their natural state. When it is not possible to return the SCA to a natural state, the portions of the channels that have been significantly altered for flood control should be improved for urban open space uses such as landscaped areas and paths. These improvements should enhance habitat values.

f. Management Policies

Policy EQ-2.27

Water Resource Management. Water resources should be managed in a systematic manner that is sensitive to natural capacities, ecological impacts, and equitable consideration of the many water-related needs of the County.

Policy EQ-2.28

Protection of Watersheds, Aquifer Recharge areas, and Natural Drainage Systems. High priority should be given to the protection of watersheds, aquifer-recharge areas, and natural drainage systems in any consideration of land use.

Policy EQ-2.29

Upstream Development Impacts. The effect of upstream development on downstream land uses should be examined during project review. The following issues should be considered:

- Increase in surface runoff
- potential for erosion
- · corresponding increase in downstream sedimentation
- decrease in water quality

Policy EQ-2.30

Water Impoundment Areas. Water impoundment areas should have marginal protection areas and should be protected and maintained for their water supply, as well as environmental and recreational values.

Policy EQ-2.31

Water Quality. Water quality should be maintained or enhanced in order to promote the continued environmental health of natural waterway habitats. A Surface Runoff Pollution Control Program should be developed for the County.

Policy EQ-2.32

Educational Uses. The use of streams and surrounding lands for educational purposes should be encouraged.

Policy EQ-2.33

Streams in Development Plans. Streams which are part of lands to be developed are a resource for their aesthetic and wildlife values. Vegetated buffer areas of native plants should be included in plans in order to protect the habitat for wildlife, to preserve and focus views, and to assure public safety. Vegetated buffer areas, rather than fencing, should be utilized except where safety issues or specific environmental concerns need to be addressed.

Policy EQ-2.34

Land Divisions in Stream Conservation Areas. Land divisions should be reviewed for size of parcels and property line locations relative to creeks to allow management of the creek by one property owner, to the greatest extent possible.

Policy EQ-2.35

Responsible Agencies/Individuals. Any agency or individual responsible for management of SCAs should undertake the responsibility for implementation of all SCA policies.

g. Flood Control Policies

Policy EQ-2.36 Floodplain Management Ordinance. The ordinance for floodplain management in compliance with regulations for the Federal Flood Control Insurance Program should continue to be implemented.

Policy EQ-2.37 Geologic Hazards. Geologic hazards in locations where dams, ponds, and other water impoundments exist or are proposed should be identified in the environmental review process. Appropriate modifications and mitigation measures should be required.

Policy EQ-2.38 Flood Control Measures. Flood control measures should retain natural features and conditions as much as possible. Compatible uses (agriculture, wildlife habitat, recreation, etc.) of flood ponding areas and seasonal floodways should be promoted.

Policy EQ-2.39 Flood Ponding Areas. Publicly controlled flood ponding areas should be retained. Ponding covenants or easements held by the Flood Control District on property should not be transferred to other properties to allow development within floodways.

Policy EQ-2.40 Alteration to Floodways, Floodplains and Ponding Areas. Filling or other physical alteration in floodways, floodplains, or ponding areas should be limited to the minimum necessary as determined in development permits issued by the County.

2. Coastal Conservation Areas

Policy EQ-2.41 Conservation of Coastal Resources. The conservation of coastal resources shall be maintained following detailed policies in the Local Coastal Plans I and II adopted by the County and the Coastal Commission.

3. Bayfront Conservation Areas

a. Habitat Protection and Restoration Policies

Policy EQ-2.42 Wildlife and Aquatic Habitats. The County shall preserve and enhance the diversity of wildlife and aquatic habitats found in the Marin County bayfront lands, including tidal marshes, seasonal marshes, lagoons, wetlands, agricultural lands, and low-lying grasslands overlying historical marshlands.

Program EQ-2.42a

<u>Protection of Bayfront Lands.</u> To ensure protection and enhancement of the bayfront lands, the County will continue to implement project review procedures in the Bayfront Conservation Zone.

Policy EQ-2.43

Limitations **Bayfront** Development and Access in Conservation Areas. Development shall not encroach into sensitive wildlife habitats, limit normal range areas, create · barriers which cut off access to food, water, or shelter, or cause damage to fisheries or fish habitats. Buffer zones between development and identified or potential wetland areas shall be provided. On residential and industrial parcels which are already filled and at least 50% developed, minor redevelopment involving less than 25% of the structure may be excluded from policies which apply to the Bayfront Conservation Zone. No additional fill will be allowed. Access to environmentally sensitive marshland and adjacent habitat shall be restricted, especially during spawning and nesting seasons.

Program EQ-2.43a

Wetland Impact Mitigation. Development should be sited to avoid wetland areas so that the existing wetlands are preserved. The next priority would be to restore or enhance the wetland environment on-site, provided that no net loss of wetlands occurs. Restoration of wetlands off-site should only be allowed when it has been demonstrated that on-site restoration is not possible and there is no net loss of wetlands. For each acre of wetland lost, two acres shall be restored and should be of the same type of wetland habitat as the wetland which was lost.

Program EQ-2.43b

Reduce Impacts to Wetlands. All technically feasible measures will be taken to reduce impacts and losses to the original wetland.

Program EQ-2.43c

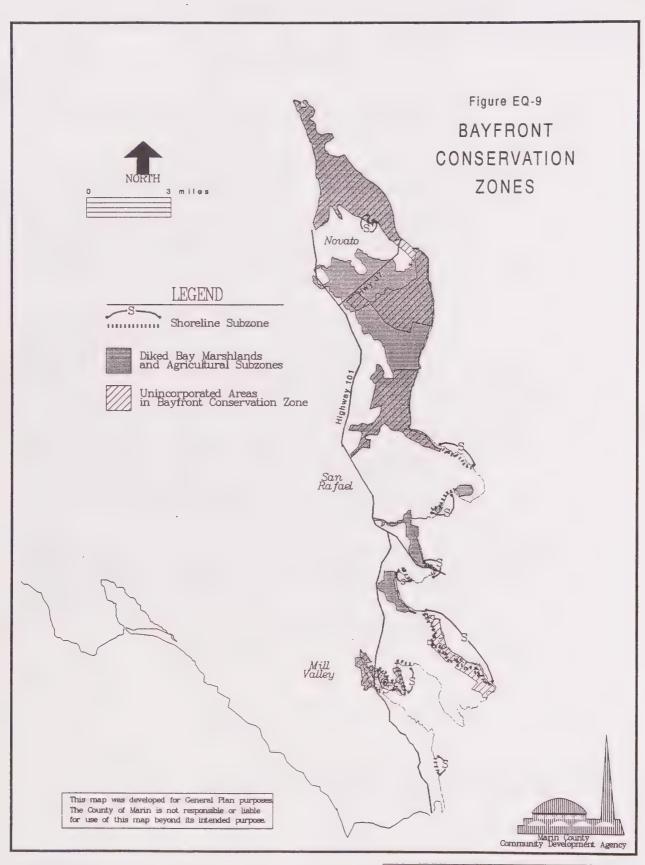
<u>Criteria for Evaluating Projects.</u> The following criteria shall be considered when evaluating development projects which may impact wetland areas and should be incorporated into mitigation measures:

- a) No net losses shall occur in wetland acreage, functions, and values.
- b) Mitigation should be implemented prior to, or concurrently with, the project component which is causing the adverse impact.

- c) An area of adjacent upland habitat should be provided for wetland species that require such habitat.
- d) Mitigation sites should be permanently guaranteed for open space and wildlife habitat purposes.
- e) Mitigation for wetland destruction should be implemented on a non-wetland site, or a historical wetland site.
- f) Restoration of wetlands is preferred to creation of new wetland areas, due to the greater likelihood of success.
- g) Mitigation projects should minimize the need for long-term maintenance and operational manipulation (dredging, artificial water level controls, etc.). Self sustaining projects are encouraged.
- h) All plans to mitigate or minimize adverse impacts to wetland environments shall include provisions to monitor the success of the restoration project. The measures taken to avoid adverse impacts may be modified if the original plans prove to be unsuccessful. Performance bonds may be required.
- i) Mitigation must be commensurate with adverse impacts of the wetland alteration and consist of providing similar values and greater wetland acreage than those of the wetland area adversely affected. All restored or created wetlands shall have the same or equivalent habitat value as the wetland lost.

Program EQ-2.43d

Establish Criteria for Buffer Zones. The County Community Development Agency shall establish criteria for determining the size of upland habitat areas (buffer zones) between development and wetland areas to be used to in review of individual development applications.



Policy EQ-2.44

Tidelands Subzone. The purpose of this subzone is to define those areas which should be left in their natural state because of their biological importance to the estuarine ecosystem. The County shall prohibit diking, filling, or dredging in areas subject to tidal action (Tidelands subzone) unless the area is already developed and currently being dredged. Current dredging operations for maintenance purposes may continue subject to environmental review, if necessary. In some cases, exceptions may be made for areas which are isolated or limited in productivity. In tidal areas, only land uses which are water-dependent shall be permitted, as consistent with federal, state, and regional policy. These include, but are not limited to:

- ports
- water-related industry and utilities
- essential water conveyance
- wildlife refuge
- water-oriented recreation

Exemptions may be granted for emergency or precautionary measures taken in the public interest, e.g., protection from flood or other natural hazard. Removal of vegetation shall be discouraged. Alteration of hydrology should only be allowed when it can be demonstrated that the impact will be beneficial or non-existent.

Policy EQ-2.45

Diked Historic Marshlands Subzone. The County shall, through its land use and development regulations, foster the enhancement of the wildlife and aquatic habitat value of the diked historic marshlands subzone. Land uses which provide or protect wetland or wildlife habitat, and which do not require diking, filling, or dredging, shall be encouraged. These uses include, but are not limited to:

- restoration to tidal status
- restoration to seasonal wetlands
- agricultural use
- · flood basin, and
- wastewater reclamation area.

In addition, other uses which do not require diking, filling, or dredging, may be allowed if such uses are consistent with the zoning designation and it can be demonstrated that impacts to the bayfront environment are minimized and mitigated. Land uses that provide protection from flood or other natural hazards may

be allowed if necessary to protect public health and safety. Existing dredging operations in developed areas may continue, subject to environmental review, if necessary.

When development is proposed, priority should be given to water oriented uses such as public access and low intensity passive recreational and educational opportunities.

Housing uses, with an emphasis on affordable housing, would provide substantial public benefit and may be considered if environmental impacts can be mitigated. The protection of the bayfront environment should take precedence over the provision of affordable housing.

Policy EQ-2.46

Freshwater Habitats. Freshwater habitats in the bayfront areas associated with freshwater streams and small former marshes should be preserved and/or expanded so that the circulation, distribution, and flow of the fresh water supply is facilitated.

Policy EQ-2.47

Use of Flood Barriers for Seasonal Habitat. Natural or managed flood basins should be utilized to provide seasonal habitat for waterfowl and shorebirds.

Policy EQ-2.48

Transfer of Development Rights. The County shall allow the transfer of the development potential of diked historic marshlands which are restored to tidal status or enhanced as wetlands habitat to upland sites, provided that development on the upland site complies with development standards for the protection of adjacent habitat areas.

Policy EQ-2.49

Planned District Development Review with Environmental Assessment. The County shall review all proposed development within the Bayfront Conservation Zone in accordance with the planned district review procedure in order to ensure maximum possible habitat restoration and protection. An Environmental Assessment of existing environmental conditions (biologic, geologic, hazard, and aesthetic) shall be required prior to submittal of development plans.

Program EQ-2.49a

Environmental Assessment of Bayfront Lands. Environmental assessment (biologic, geologic, hazard, and aesthetic) of existing conditions on proposed development sites will be completed prior to preparation of master plans and development plans. These assessments will include recommendations for siting and design that will avoid adverse environmental impacts. When it is not

possible to avoid impact, recommendations shall include provisions for minimizing environmental impact. The assessment should serve as a portion of the Environmental Impact Report on the project and recommendations should be incorporated into the project itself. Refer to Program 2.43a for detailed criteria to be used in formulating recommendations for siting and design.

Program EQ-2.49b

Planned District Rezoning. The County will rezone all parcels within the Bayfront Conservation Zone to a Planned District designation (where this has not already been done). Some of the potential environmental impacts of development in the bayfront lands can be mitigated by proper siting and by buffer zones between projects and adjacent wetlands. After review and approval by the County, the applicant would then prepare a detailed development plan, based on findings in the Environmental Assessment (see Policy 2.49). This would also be reviewed and acted on by the County.

Policy EQ-2.50

Conservation with Trustee Agencies within Bayfront Conservation Areas. The County shall facilitate consultation and coordination with the trustee agencies (Department of Fish and Game, U.S. Fish and Wildlife Service, the Corps of Engineers, EPA, Regional Water Quality Control Board, and BCDC) during environmental review and during review of other proposals for lands within the Bayfront Conservation Zone.

Program EQ-2.50a

Early Consultation with Other Agencies. Any development project within the Bayfront Conservation Zone is subject to the review, and possibly the permit process, of federal and state agencies with jurisdiction over wetlands. It is critical that the applicant consult with these agencies at the very outset of a development project. The County will make every effort to coordinate its review process with the review process of other agencies, consulting with them on the environmental assessment and the master plan. The applicant will be informed at the first contact with the Community Development Agency which other agencies are likely to claim jurisdiction and what the policies and standards of those agencies are regarding development activities in the Bayfront Conservation Zone. The National Wetland Inventory Maps (NWI) will aid County staff in providing this information to applicants.

- b. Protection of Environmental Quality Policies
- Policy EQ-2.51 Minimal Impacts Within Bayfront Conservation Zone. The County shall ensure that development in the County occurs in a manner which minimizes the impact of earth disturbance, erosion, and water pollution within the Bayfront Conservation Zone.
- Policy EQ-2.52 Disruption to Runoff and Stream Flow. Disruption or impediment to runoff and stream flow in the watersheds of Marin County marshes should not be permitted if an environmental assessment indicates that the quality of the water entering the marshes and bay would be diminished.
- Policy EQ-2.53 Siting of Industrial Facilities. The development and siting of industrial (and any other) facilities adjacent to bayfront areas should be planned to eliminate significant adverse environmental impacts on the water quality of the bay and marshes.
- Policy EQ-2.54 Tides and Currents. The development of jetties, piers, outfalls, etc., should not be allowed to alter the movement patterns of the bay's tides and currents, such that significant adverse impacts would result.
- Policy EQ-2.55 Bay Fill. The County shall discourage any bay fill that diverts and retards currents, increases the deposition of sediments, or causes erosion and pollution.
- Policy EQ-2.56 Waste Discharge. The County shall not permit waste discharge which would contaminate water resources or adversely affect any inter-tidal environment. Municipal discharges should move toward partial consolidation and relocation of discharge points.
- Policy EQ-2.57

 Basin Plan. The County Department of Public Works shall continue to cooperate with the EPA and the Regional Water Quality Control Board in implementation of the San Francisco Bay Basin Plan. This includes the preparation of a Baseline Control Program. This program will help to prevent future water quality problems and limit increases in pollutant discharge.
- c. Agricultural Uses in Bayfront Lands Policies
- Policy EQ-2.58 Protection of Existing Agricultural Lands. The County shall protect existing agricultural lands in the Bayfront Conservation

Zone. These lands are an important resource for the County because they:

- are a visual and scenic resource:
- play an integral role in other agricultural and dairy operations in Marin County;
- are a productive economic resource; and
- are compatible with water-related wildlife habitat.

Such agricultural activities could consist primarily of grazing operations and crop production harmonious with adjoining marshes, wetlands, grasslands, or other sensitive lands. Agricultural lands provide habitat for many wildlife species. These habitats may be important for migratory species during times of flood and after silage has been cut.

Policy EQ-2.59

Natural Vegetation. Agricultural activities should minimize removal of natural vegetation and avoid the removal of wetland vegetation, where possible.

Policy EQ-2.60

Pesticides, Insecticides and Similar Materials. The County will encourage the use of integrated pest management practices to control pests with the least possible hazard to people, property, and the environment. It is a suggested goal of the County to urge the reduction in the use of pesticides and chemical treatments whenever possible. Non-toxic strategies for pest control, such as modifying habitats, using physical controls, and biological controls are encouraged as an alternative to chemical treatment.

- d. Protection from Geologic, Flooding and Other Hazards Policies
- Policy EQ-2.61

Consistency with Environmental Hazards Element. Any development proposed for lands within the Bayfront Conservation Zone must be consistent with policies and proposals of the Environmental Hazards Element, including avoidance of areas that pose hazards such as:

- differential settlement
- slope instability
- liquefaction
- ground shaking
- ground rupture
- · tsunami, and
- other types of ground failures.

Policy EQ-2.62

Areas Underlain by Deposits of Bay Muds. Those areas underlain by deposits of "young muds" should be reserved for water-related recreational opportunities, habitat, open space, or limited development subject to approval by the Corps of Engineers and other trustee agencies.

Policy EQ-2.63

Sites with Poor Soil Conditions or Seismically Active. Any development (within the watershed areas) proposed for sites that have poor soil conditions for construction or that are seismically active should be designed to minimize:

- earth disturbance
- erosion
- water pollution, and
- hazards to public safety.

Policy EQ-2.64

Land Uses in Floodplains. Areas defined as floodplain should serve the dual purpose of habitat and flood protection. Areas should be evaluated periodically to determine whether increases in the volume and rate of runoff from urbanization or natural forces warrant further flood mitigation measures.

Policy EQ-2.65

100-year Floodplain. The County's regulatory procedures should reflect 100-year floodplain areas as determined by the Federal Emergency Management Agency (FEMA).

- e. Public Access and Bayfront Recreation Policies
- Policy EQ-2.66

Use of Shoreline Areas. Public use of the shoreline areas is desirable and should be encouraged consistent with ecological and safety considerations.

Policy EQ-2.67

Ensuring Public Access of Shoreline Areas. The County shall ensure that public access is provided and protected along the bayfront and significant waterways. Public access easements are the primary means available for increasing public access opportunities. Dedications of these easements result from a condition imposed on development plan approval. Public access should be allowed only where access can be accommodated without damaging the wildlife habitat.

Policy EQ-2.68

Public Access Easements. The County will accept, as resources permit, public access easements where the offered easement is in a developed area and substantial use could be expected by local residents. Where the County accepts an easement, it will be

responsible for signing, providing appropriate facilities, and maintaining the easement. If the County does not accept an easement, it shall attempt to find appropriate public or private agencies to do so.

Policy EQ-2.69

Evaluation of New Public Access Areas. The County shall evaluate potential new public access areas in order to determine the feasibility of providing access and the priorities for acquisition, based on the following criteria:

- desirability of the site;
- capacity to sustain use without significant adverse impacts on the bayfront habitat and wildlife;
- potential for hazard to public safety or health;
- availability of other public access points in the area; and,
- compatibility with adjacent land uses.

Policy EQ-2.70

Siting and Design of Public Access. Public access should be sited and designed to facilitate public use and enjoyment of the bayfront lands, along with protection of wildlife habitat. Where possible, buffers and upland habitat should remain, or be constructed, between wetland habitats and public use areas. Public areas should be clearly marked, and continuous ten-foot walkways from the nearest roads to the shoreline and along the shoreline should be provided. Public access areas should be designed to minimize possible conflicts between public and private uses on the properties. In general, walkways should be set back at least ten feet from any proposed structure. Public access shall designed to avoid disturbance of wetlands and sensitive wildlife habitat areas.

Policy EQ-2.71

Wildlife, Recreation, and Educational Uses. Within the BFC Zone, provisions should be made for: recreational development; access to the shoreline for uses such as fishing, boating, lunting, picnicking, hiking, and nature study; separated wildlife preserves. Appropriate means of providing public education on the value of shoreline preservation and the shoreline shall be encouraged.

f. Aesthetic and Scenic Quality Policies

Policy EQ-2.72

Viewshed Protection. The County shall protect visual access to the bayfront and scenic vistas of water and distinct shorelines through its land use and development review procedures. This viewshed protection is essential for the preservation of Marin County and San Francisco Bay identity, for the enhancement of aesthetic qualities, and for visual and psychological relief from adjacent urban environments.

Policy EQ-2.73

View Corridor Identification and Enhancement. Existing built elements, such as overhead utilities, which detract from the shoreline and marsh landscape should be eliminated or blended into the environment. Sites with opportunities for near and distant views of the bayfront and bay should be identified, protected and enhanced by improvements (turnouts, benches, etc.) where possible. View corridors and a low profile should be maintained on adjoining sites as well.

Policy EQ-2.74

Design of Waterfront Development. Waterfront development should be designed for openness and to permit optimal views for public enjoyment of the bayfront.

4. Air Quality Resources

Policies in the Community Development Element and the Transportation Element will also serve to reduce the impact of future development on air quality resources.

Policy EQ-2.75

County's Air Quality Standards. The County shall adhere to the Federal or State air quality standards, (Table EQ-5) whichever are more stringent, for management of locally generated pollutants.

Table EQ-5. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	National	California
Carbon Monoxide (CO)	8-Hour	9.30 ppm	9.00 ppm
Ozone (0_3)	1-Hour	0.12 ppm	0.09 ppm
Nitrogen Dioxide (NO)	Annual	0.05 ppm	
	1-Hour		0.25 ppm
Sulfur Dioxide (SO ₂)	Annual	0.03 ppm	
_	24-Hour	0.14 ppm	0.05 ppm
Total Suspended Particulate	Annual Geometric Mean		30 ug/m ³
(P.M. < 10)	24-Hour		50 ug/m^3

ppm = Parts per million

 $ug/m^3 = micrograms per cubicmeter$

P.M. < 10: Particulate matter less than 10 microns in diameter

Source: U. S. Environmental Protection Agency; California Air Resources Board

Policy EQ-2.76

Coordination of Air Quality Planning Efforts. The County shall coordinate air quality planning efforts with local, regional, and State agencies.

Program EQ-2.76a

<u>Project Review for Air Quality Concerns.</u> The County shall notify local and regional jurisdictions of proposed projects in unincorporated areas which may affect regional air quality, as governed by project type and size thresholds in Table EQ-6.

Table 6. Thresolds for Submission of Documents to BAAQMD

Land Use Category	Threshold Levels	
Housing		
Single Family	200 units	
Apartments	300 units	
Parking	250 spaces	
Shopping Center		
Regional	60,000 ft ² or 6 acres of land area	
Neighborhood	$60,000 \text{ ft}^2 \text{ or } 6 \text{ acres of land area}$	
Individual Store	$60,000 \text{ ft}^2 \text{ or } 6 \text{ acres of land area}$	
Industry		
Undifferentiated	15 acres	
Mass Production	15 acres	
Industrial Park	20 acres	
Administration	20 acres	
Warehouse	20 acres	
Research & Devel.	40 acres	
Office Bldg	100,000 ft ²	
Government Bldg	30,000 ft ²	
Motel	200 units	
Restaurant		
Full Service	700 seats	
Fast Food	40 employees	
Drive-in	4,000 ft ²	
Theater	900 seats	

Note: Any facility attracting or generating more than 1,927 motor vehicle trips/day (969 vehicles, in and out) will be subject to BAAQMD review.

For a detailed description of emissions and methodology, see <u>Air Quality and Urban Development Guidelines for Assessing Impacts of Projects and Plans</u>, Bay Area Air Quality Management District, November 1985, Page II-3.

Program EQ-2.76b

Cooperative Enforcement of Federal, State and Regional Air Quality Standards. The County shall cooperate with the BAAQMD and California Air Resources Board in enforcing the provisions of the Clean Air Act, State, and regional policies and established standards for air quality.

Policy EQ-2.77

Location of Land Uses Near Air Pollution Sources. The County shall consider air pollution impacts when locating pollution-sensitive land uses near sources of air pollution.

Program EQ-2.77a

Location of Air Pollution Point Sources Near Other Land Uses. The County should consider air pollution impacts when locating air pollution point sources such as manufacturing, extracting, and hazardous materials storage sites proximate to residential areas and other sensitive receptors.

Program EQ-2.77b

<u>Upwind Location of Sensitive Receptors.</u> The County should consider the potential air pollution impacts of locating sensitive receptors (facilities where individuals are highly susceptible to the adverse effects of air pollutants) near freeways, arterials and other major transportation facilities and should urge location of these uses upwind of such transportation facilities.

Policy EQ-2.78

Air Quality Impacts of Proposed Projects. As part of its Environmental Review Process, the County shall review proposed projects for their potential impact on air quality conditions.

Program EQ-2.78a

Air Quality Mitigation. The County shall require projects which generate high levels of air pollutants to incorporate air quality mitigation in the project design.

Policy EQ-2.79

Vehicular-Generated Pollutants. The County shall support a transportation program which serves to reduce vehicle trips and/or increases ridesharing so as to reduce pollutants emitted by vehicular combustion engines.

Policy EQ-2.80

Vehicular Congestion During Peak Hours. The County shall seek ways to reduce vehicular congestion during peak commuting hours in order to reduce emissions from combustion engines during those times.

5. Mineral Resources

Policy EQ-2.81

Protection of Designated Mineral Resource Sites. The County shall protect designated sites from temporary or permanent land uses which would preclude or inhibit timely mineral extraction to meet market demand.

Program EQ-2.81a

Designated Mineral Resource Sites Identified. The County shall assign the label "Designated Mineral Resource" and shall create and map an overlay zoning district for all Sectors designated by the California Division of Mines and Geology within unincorporated Marin County. These sites include all or portions of the following parcels, identified by Assessor Parcel Numbers: 184-01-15,16,52 (San Pedro Hill), 125-180-62 (Mt. Burdell), 119-010-08 and 119-060-12 (Borello), 125-150-26 (Ghilotti). Further reference may be found in Part III. Classification of Aggregate Resource Areas North San Francisco Bay Production-Consumption Region. Special Report 146 by the California Department of Conservation, Division of Mines and Geology, 1983. Designated Sector J (APN 125-180-62, Mt. Burdell) and Sector M (APN 125-150-26, Ghilotti Quarry) have been exempted from these policies because convincing evidence has been presented to indicate that these sites do not contain sufficient material to meet the state defined thresholds for designated MRZ-2 sites.

Program EQ-2.81b

Ring Mountain, Designated Mineral Resource - Scientific Zone. The County shall assign the label "Designated Mineral Resource-Scientific Zone" to all or portions of the following parcels (Ring Mountain) 038-182-31,32,36,37 to preclude future development or mining operations on this unique resource and indicate affected areas on County zoning maps.

Program EQ-2.81c

Notice on Property Titles of Mineral Resource Areas. The County shall record the presence of important mineral resources on property titles in mineral resource areas.

Policy EQ-2.82

Buffer Between Potential Mineral Extraction Aaeas and Incompatible Land Uses. The County shall further protect designated mineral resource sites by creating a buffer of land uses between potential mineral extraction areas and areas with land uses incompatible with mining.

Program EQ-2.82a

Designated Mineral Resource Overlay Zone District. The County shall include requirements in its "Designated Mineral

Resource" overlay zone district to require a sufficient buffer between mining and land uses incompatible with mining.

Policy EQ-2.83

Nuisances, Hazards or Adverse Environmental Impacts of Mining Operations. The County shall assure that, after mitigation measures are taken, a proposed mining operation will not create significant nuisances, hazards, or adverse environmental impacts.

Program EQ-2.83a

Mitigation to Address Nuisances. The County shall amend Marin County Code Section 23.06.040 application (for mining permit) to require applicants to list what mitigation will be taken to address nuisances to neighboring properties for proposed mining operations.

Program EQ-2.83b

<u>Environmental Review.</u> The County shall require an Initial Study and may require an Environmental Impact Report on all mining or quarrying permits requested after the date of adoption of these policies.

Policy EQ-2.84

Reclamation of Mined Lands. The County shall assure that all mining operations provide for adequate reclamation of mined lands before issuing mining or quarrying permits.

Program EQ-2.84a

<u>Reclamation Requirements.</u> The County shall continue to enforce the reclamation requirements of Marin County Code Section 23.06.

Program EQ-2.84b

Wetlands. The County shall augment Section 23.06.40(5) Application to require Reclamation Plans to include a) protection of wetlands, if any and b) reduction of negative visual impacts.

Policy EQ-2.85

Excavation of Wetlands. Wetlands proposed for excavation shall be reviewed for significant habitat value and will be protected in lieu of mining where significant mineral resources have been identified.

Program EQ-2.85a

Return to Wetland Status. Wetlands that are mined shall be reclaimed and returned to wetland status after conclusion of mining operations.

Policy EQ-2.86

Removing a Site from Application of these Policies. When a site is mined and satisfactory evidence is presented that it no longer contains the threshold amount of resource, the County

shall institute action to remove the site from the application of these mineral resource preservation policies.

6. Species Protection

Policy EQ-2.87

Species Preservation in the Environmental Review Process. Environmental review of development applications shall consider the impact of the proposed development on species and habitat diversity. Environmental review documents should propose mitigation measures for ensuring the protection of the habitat and species therein.

Program EQ-2.87a

Species and Habitat Protection. All project permits, including development, grading, and tidelands permits, shall include conditions or mitigation measures to ensure the continued health and survival of the habitat and the plants and wildlife, to the greatest extent possible.

Program EQ-2.87b

Wildlife Corridors. Development permits shall include conditions or mitigation measures to ensure that corridors for wildlife movement and dispersal are not destroyed or altered in such a way as to destroy or significantly diminish the use of the site as a corridor for animal movement and dispersal.

Program EQ-2.87c.

<u>Edge Habitats.</u> Development applications shall be conditioned or modified to ensure that edge habitats are not destroyed or altered in such a way as to destroy or significantly diminish the diversity of species using the site.

Program EQ-2.87d

Regeneration of Species. The County should encourage plans to regenerate plant species, when an environmental assessment indicates this is the preferred course of action.

Program EQ-2.87e

<u>Development Near Park Lands.</u> When development is proposed on lands adjacent to State or Federal parklands, the County shall require the removal of all invasive exotic vegetation prior to development.

Policy EQ-2.88

Protection of Special Status Species. Development shall be restricted or modified in areas which contain special status species and migratory species of the Pacific Flyway and/or significant natural areas, wetlands, riparian habitats, and freshwater habitats, to ensure the continued health and survival of these species and areas.

Program EQ-2.88a

Special Status Species and Significant Natural Areas. Development permits shall include conditions or mitigation measures to ensure the continued health and survival of special status species, migratory species of the Pacific Flyway and Significant Natural Areas (as defined by the California Department of Fish & Game), wetlands, riparian habitats, and freshwater habitats. Development projects shall be modified to either avoid impact to sensitive communities or mitigate impacts by providing on- or off-site replacement.

Program EQ-2.88b

Environmental Assessment for Significant Natural Areas. The County shall require that applicants provide an environmental assessment for development proposed on sites identified as Significant Natural Areas. The assessment shall be conducted by a qualified biologist and shall identify the presence of specific sensitive species and measures for protecting the species and habitat.

Program EQ-2.88c

Species Protection Resource Center. The County Community Development Agency should establish and maintain a Species Protection Resource Center in order to accurately assess the potential impacts of proposed development on species and habitat diversity. The Resource Center shall contain:

- 1) All up-to-date information on verified sightings of specialstatus species and significant natural areas as compiled by the California Department of Fish and Game, Non-Game Heritage Division;
- 2) All reports and recovery programs for special-status species and significant natural areas;
- 3) All up-to-date information from the United States Fish and Wildlife Service, including sightings and inventories of the migratory species of the Pacific Flyway; and,
- 4) Reports, siting and recovery programs from reliable, local sources such as the Point Reyes Bird Observatory and the Marin Audubon Society.

C. THE BUILT ENVIRONMENT

Objective EQ-3. The Built Environment. To establish a method and approach for managing the built environment within the context of the natural environment and available resources of Marin County.

1. General Policies

Policy EQ-3.1 Project Review Procedures. The County shall continue to implement and review specific procedures for reviewing public and private actions that significantly affect the quality of the environment throughout the county, in accordance with the characteristics of each proposed action and each potential location (see Table EO-7).

Policy EQ-3.2 Air, Water, and Noise Pollution. Air, water, and noise pollution shall be prevented or minimized.

Policy EQ-3.3 Radioactive, Chemical, and Biological Health Hazards.
Radioactive, chemical, and biological health hazards to humans or wildlife shall not be created, and existing levels shall be reduced. The most current technical information will be utilized to implement this policy.

Policy EQ-3.4 Changes to Hydrological and Biological Processes. No operation shall cause irreversible damage or more than minimum reversible change to natural hydrological and biological processes.

Protection of Unique Geologic, Ecologic, Archaeologic, and Historic Sites. Unique geological, ecological, archaeologic, and historic sites shall be protected. Significant natural features shall be included for preservation in their natural state and in an appropriate setting in any design or plan.

Policy EQ-3.6 Wildlife, Vegetation and Habitats. A diversity and abundance of wildlife and marine life shall be maintained. Vegetation and animal habitats shall be preserved wherever possible.

Policy EQ-3.7 Avoidance of Hazards from Earthquake, Erosion, Landslide, Floods, and Fires. Construction and operations shall be located and designed to avoid or minimize the hazards from earthquake, erosion, landslides, floods, fire, and accidents consistent with policies and programs in the Environmental Hazards Element.

Table EQ-7. Suggested Development Review Checklist for Environmental Zones

	Environmental Zone	ImportantShould be Required	DesirableNegotiate with Incentives
1.	Open Grassy Hillsides Coastal Foothills Central Upland Mountains Bayside Foothills (See Figure EQ-11)	 Rural roads and minimal lighting Replant graded cuts and fills with fire resistant plant material 	 Buildings clustered in pockets below ridge line Grazing or management plan for retaining grassy hillside character Planting program with native growth predominant
2.	Wooded Hillsides Coastal Foothills Central Upland Mountains Bayside Foothills (See Figure EQ-12)	Retain trees in natural setting Leave substantial area where natural litter and soils buildup can occur	 Buildings set apart (scattered acceptable) Buildings grouped naturally in tree area, no detrimental grading or runoff Ridge line not developed
3.	Creekside, Coastal and Bayside Settings Coastal Terraces Inland Valleys Bayside Plain (See Figure EQ-13)	 Use creek as common open space in natural setting Protect creek habitat Prevent harmful stream blockage and maintain natural riparian vegetation Prevent gullying by diversion of excess surface runoff Creek setting as buffer zone with connecting trails to larger usable open space reserves 	
4.	Bayfront Conservation Zone	* Policy provisions of the Bayfront Conservation Zone	
5.	Activity Centers Enclosed valley or area exposed to travel (Figure EQ-14 &15)	 Sympathetic relationship to existing built environment in vicinity Central usable open space linked to perimeter open space areas Cluster to reduce cost of roads and utilities; savings passed on in reduced unit cost charges Dedicate or manage open space in ratio to developed area Exterior grounds and building maintenance program Provide greenbelts, landscaped or natural with paths 	 Buffer zone landscaped, not fenced on boundary Focal or prominent feature protected, rock outcrop special wall, clump of trees Sediment production increased minimally or stabilized Provision for elderly, handicapped, group care Recreation facilities, clubhouse, tennis courts, swimming Walk system to reach schools, church, and shopping with traffic conflicts minimized Road system easily understood by visitors

Policy EQ-3.8

Built Environments. Built environments where people spend most of their time shall be healthful, safe, quiet, and of good design both functionally and aesthetically. Policies designed to maintain the character of existing neighborhoods should be included in individual community plans.

Policy EQ-3.9

Adverse Impacts on Services, Circulation, Economic, and Social Environment. Projects shall not cause significant adverse impacts on water supply, fire protection, waste disposal, schools, traffic and circulation, or other services and facilities, or on the financial or social environment of the community.

Policy EQ-3.10

Coordination of Public Services. Water supply, flood control, wastewater and solid waste disposal, soil conservation, open space preservation, and natural resource extraction shall be coordinated to create the greatest public benefit and the least degree of environmental damage.

Policy EQ-3.11

Visual Qualities and Views. Visual qualities and the view potential of the natural and built environment shall be considered in any project or operation review. Tree-cutting and damage shall be avoided wherever possible.

Program EQ-3.11a

<u>Identify View Corridors</u>. The County should identify important view corridors, such as the Highway 101 corridor, and establish design criteria for development in these areas.

Program EQ-3.11b

Minimize Visual Impacts of Public Facilities. The County should require appropriate placement, setbacks, and landscaping of public facilities, such as sound walls, power lines, and water tanks, over which it has discretionary review, to reduce visual impacts and impacts on views of hillsides, ridgelines, open space, and the Bay. The County should encourage similar measures to reduce visual impacts for public projects over which it does not have jurisdiction.

Policy EQ-3.12

Minimal Resource Use and Recycling. Resource use shall be the minimum necessary. Recyclable and biodegradable materials shall be utilized, and used materials shall be recycled or reused whenever possible. Use of reclaimed water should occur whenever possible.

Policy EQ-3.13

Aggressive Exotic Plants. The planting of aggressive exotic plants such as broom and pampas grass should be avoided in any development over which the County has review authority.

Policy EQ-3.14

Protection of Trees. The County shall strive to protect large trees, trees with historical importance, and oak woodland habitat, and prevent the untimely removal of trees through implementation of a tree preservation ordinance.

Program EQ-3.14a

<u>Tree Preservation Ordinance.</u> The County Community Development Agency shall develop a tree preservation ordinance which will protect significant trees (native, heritage, and large street trees) prior to a specific development proposal. The ordinance will address the following issues:

- 1. Removal of a certain size of tree (generally greater than 6" in diameter) or type of tree (heritage trees) and establishment of a permit procedure if removal is absolutely necessary. Replacement of tree(s) will be required.
- 2. Require a permit prior to clearing a site for development. The applicant should provide a diagram which indicates the size and location of trees which will be removed, as well as a plan for replacement of trees. Replacement should occur at a ratio of 2:1, except where physical conditions on the site make this ratio infeasible.
- 3. Protection of the oak woodland environment to allow opportunities for regeneration and survival of seedlings and saplings. Specifically protect trees with a diameter of 6" or greater, and require replacement at a ratio of 2:1.
- 4. Enforcement mechanisms (including penalties) for unlawful removal of trees.
- 5. Protection of Redwood Groves and the California woodland habitat, including provisions to protect regeneration of seedlings and saplings.
- 6. Protection of trees during construction and specifying a maximum percentage of trees which may be removed.
- 7. Protection of significant stands of trees (10 trees per acre).

Policy EQ-3.15

Transmission Lines and Consideration of Exposure to Electromagnetic Fields. The proximity of transmission lines to residents or schools and the potental exposure to electromagnetic fields (EMF's) should be considered in the review of

development proposals. Whenever possible, engineering solutions should be employed to reduce exposure to electromagnetic fields, and alignment of new transmission lines should be set up to reduce residential exposure to the fullest extent possible. As new information becomes available, the County may establish development standards related to electromagnetic fields.

Policy EQ-3.16

Minimize Excavating, Grading, and Filling. New development in the County shall adhere to the standards of the Department of Public Works in order to minimize excavating, grading, and filling, while allowing for adequate access.

Policy EQ-3.17

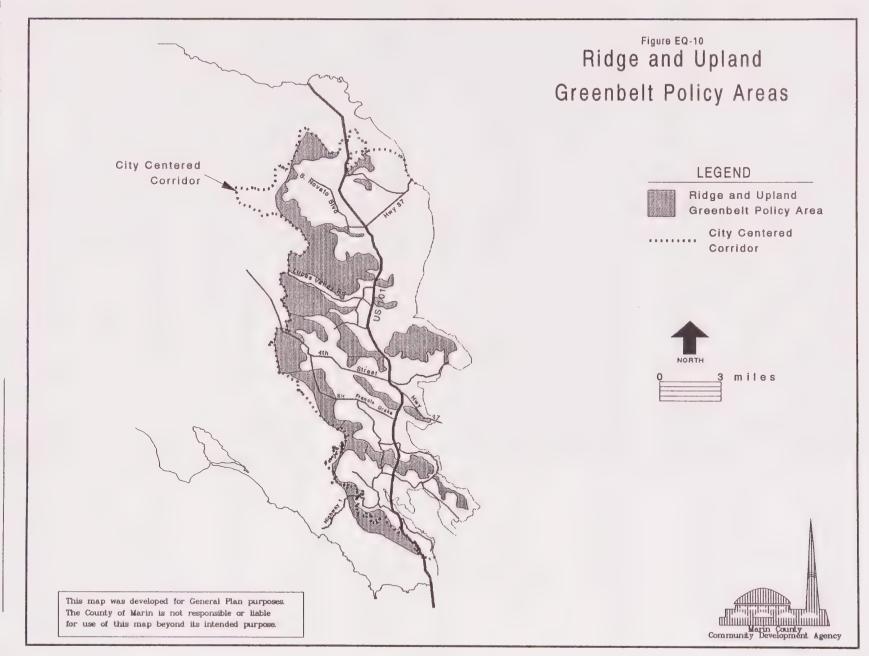
Discourage Use of Pesticides. The County will encourage the use of integrated pest management practices to control pests with the least possible hazard to people, property, and the environment. It is a suggested goal of the County to urge the reduction in the use of pesticides and chemical treatments whenever possible. Non-toxic strategies for pest control, such as modifying habitats, using physical controls, and biological controls are encouraged as an alternative to chemical treatment.

2. <u>Design Criteria</u>

The criteria for evaluating the design quality of structures in various environmental zones contained in Figure EQ-10 (and accompanying figures) should be used in reviewing proposed actions and in establishing requirements and incentives for the development of land.

Policy EQ-3.18

Ridge and Upland Greenbelt-General Policy. All development proposed in the ridge and upland greenbelt areas shall be evaluated for its potential impact on visual resources and amenities (see Figure EQ-10).



Program EQ-3.18a

Design Review - Ridge and Upland Greenbelt. All areas within the ridge and upland greenbelt shall be zoned with a Planned District designation. The ridge and upland greenbelt areas will be subject to the Design Review Requirements (Marin County Code Title 22) which contain specific recommendations for clustering and avoidance of building along ridgelines. The prominence of construction should be minimized by such mechanisms as placing buildings so they will be screened by wooded areas, rock outcroppings, and depressions in the topography.

Policy EQ-3.19

Ridge and Upland Greenbelt-Grassy Hillsides. On open and grassy hillsides buildings should be clustered well below the ridge, rather than scattered or grouped at the ridge top, to avoid the appearance of sprawl and preserve an important visual resource. Buildings should be clustered in the least visually prominent portion of the site (see Figure EQ-11).

Policy EQ-3.20

Ridge and Upland Greenbelt-Wooded Hillsides. The preservation of trees on wooded hillsides is of paramount concern. A general scattering of buildings at a very low density may be desirable in order to preserve trees. The intent of this policy is to maximize protection of visual resources (see Figure EQ-12).

Policy EQ-3.21

Creekside Development. Along creeks, development must retain the natural vegetation, prevent water pollution, and minimize flood hazards from runoff (see Figure EQ-13).

Policy EQ-3.22

Mudflats and Tidal Areas. On low-lying mudflats or tidal fill areas, protection of plant and wildlife habitat is of primary importance. The provision of public access to creeks, streams, and the shoreline should also be encouraged (see Figure EQ-13).

Policy EQ-3.23

High-Intensity Nodes/Activity Centers. The design of high-intensity nodes of development in the City-Centered Corridor is important, because these areas are visited by large numbers of people. These nodes include countywide activity centers, smaller community activity centers, and business developments such as office concentrations and industrial parks. Business, commercial, and high-density residential development should be concentrated in these centers, shown in the Community Development Element of the Countywide Plan (Figure EQ-15).

Policy EQ-3.24

Design of Activity Centers. Four major principles should guide the design of countywide and community activity centers and business development areas (see Figures EQ-14 and EQ-15):

Accessibility. Centers attracting large numbers of people must be well served by transportation lines, especially by public transit. Walkways should connect buildings conveniently with nearby transit stops. Bicycle and walking paths should connect with adjacent areas, to encourage local access by means other than the automobile.

Concentration. Intensive development must be concentrated at a relatively few highly accessible locations. Development along Highway 101 or other major roadways must not take the form of a solid or intermittently broken wall of high-density development. Development must be in the form of compact and fairly dense centers at carefully selected locations, separated by low-density development and open space. This configuration along Marin's major transportation corridor would support efficient transit, stimulate the creation of accessible jobs, and reduce sprawl, in addition to providing a pleasant view from the freeway.

Multiple Uses. Uses that are mutually supportive will be encouraged. The provision of housing in business and commercial areas can be beneficial by making services and jobs readily available to residents, supporting a wide range of commercial activities in the evening and on weekends, and increasing the use of public transit. Activity centers should also provide spaces for formal and informal public gatherings. The reuse and redevelopment of existing community centers should emphasize mixed use.

Amenity. Centers of business and employment must offer an attractive environment, with landscaping, distinctive lighting and outdoor furnishings, and public sitting areas. Public access to waterfront areas should be provided, and historic buildings and sites should be preserved. The visual impact of parking must be minimized by placing it underground where possible and landscaping surface lots. Views of important natural and built features will be preserved and enhanced.

Policy EQ-3.25

Scale of Development. The development of residential structures should be in scale with environmental constraints such as steep slopes and the design character of the existing neighborhood.

Policy EQ-3.26

Rural Character and Lighting. Development in rural portions of the County (particularly in West Marin communities) should be consistent with the rural character of the area and should provide lighting which is subtle and harmonious with the rural environment.

Program EQ-3.26a

<u>Criteria for Rural Character and Lighting.</u> The County Community Development Agency shall develop a set of criteria (including provisions for lighting) to ensure that future development in rural portions of the County is consistent with the rural character of the environment.

Policy EQ-3.27

Identification of Wetlands Outside the BFC Zone. At the time of a site specific development application, the County shall require the applicant to identify seasonal and year-round wetlands which may be located outside the BFC zone. Development shall be situated so that wetlands are protected and preserved to the maximum extent feasible. Policy EQ-2.43 shall apply to wetlands outside the BFC zone.

Policy EQ-3.28

Hillside Design Guidelines. The Community Development Agency should develop hillside design guidelines to ensure that the height and mass of new structures is compatible with the environmental constraints of the site and the character of the surrounding neighborhood.

Program EQ-3.28a

Develop Hillside Design Guidelines. The Community Development Agency shall prepare a set of hillside design guidelines and establish criteria for determining when it is appropriate to apply the guidelines in the review of development projects.

Figure EQ-11. Open, Grassy Hillside Design Criteria

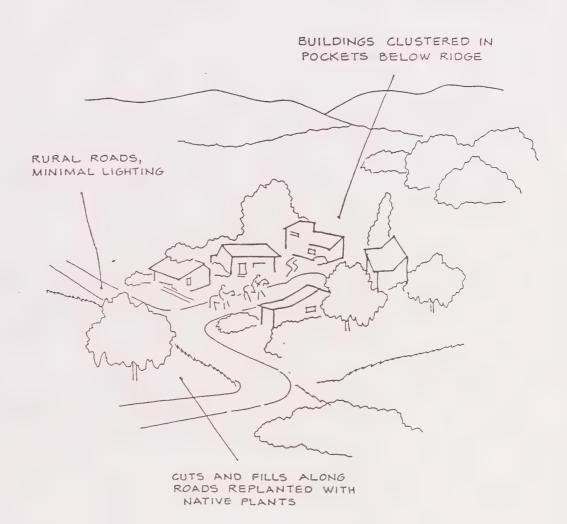


Figure EQ-12. Wooded Hillside Development Design Criteria

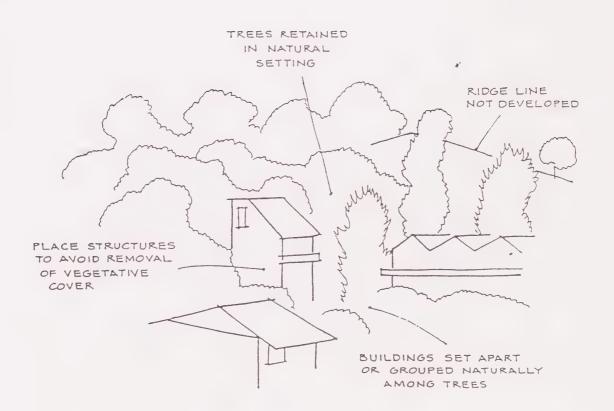


Figure EQ-13. Creekside, Coastal and Bayside Development Design Criteria

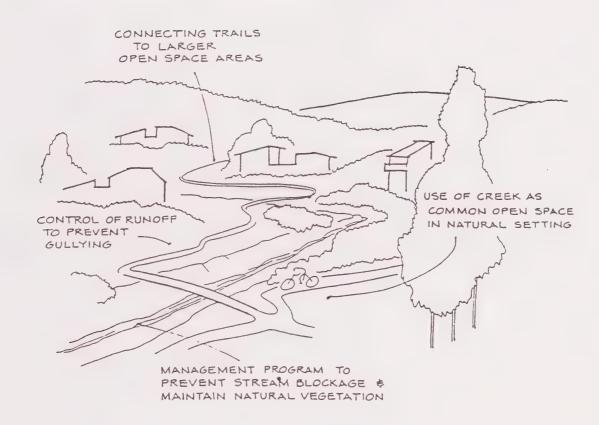


Figure EQ-14. Countywide and Community Activity Centers Design Criteria

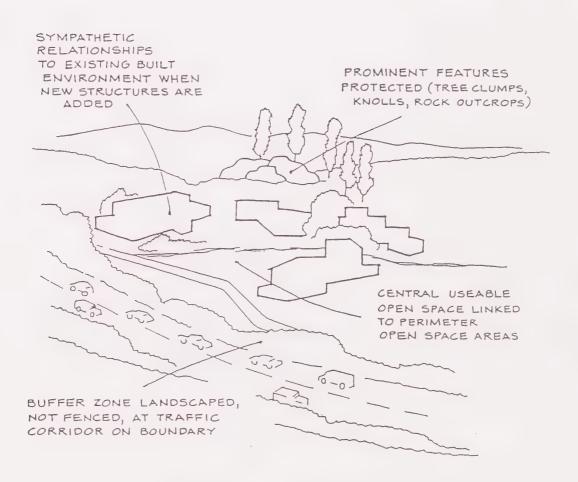
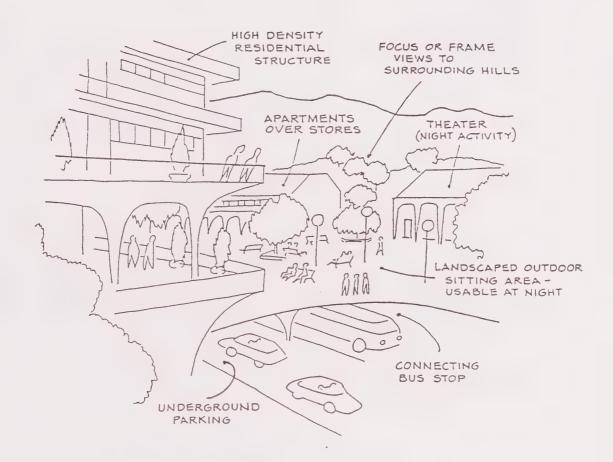


Figure EQ-15. Design Principles for Activity Centers



3. Preservation of Cultural and Archeological Resources

The following policies (adapted from Appendix K of the CEQA Guidelines) should be implemented in order to strengthen the protection of cultural and archeological resources.

Policy EQ-3.29

Review Sensitivity Maps. The Community Development Agency shall review the archeological sensitivity map for all development applications in order to determine potential impacts.

Program EQ-3.29a

Prepare New Sensitivity Map. The County Community Development Agency should identify potential archeological locations or areas where there may be a high likelihood of archeological resources in a sensitivity map which is not site specific.

Policy EQ-3.30

Evaluate Presence of Site. Development sites identified as having a potential for the presence of archeological resources (through review of the sensitivity map or other available sources) shall be further evaluated to ascertain if an archeological site is actually present. This evaluation shall be the responsibility of the applicant and may be undertaken by conducting a record search at the Northwest Information Center of the California Archaeological Inventory to determine if the project area has been previously surveyed and if resources have been identified. If the record search reveals that no survey has been undertaken, the applicant may be required to undertake a survey of the site, depending upon the sensitivity of the site.

Policy EO-3.31

Avoid Impact. When a site has been identified as an archeological resource, development shall be situated or designed to avoid impact on the archeological resources. This may be accomplished through one or more of the following methods:

- siting buildings to completely avoid the archeological site;
- providing parks, or some type of open space to incorporated archeological sites;
- "capping" (covering the site with a layer of soil);
- deeding the site as a permanent conservation easement.

Policy EQ-3.32

Discovery of Resources. In the event archeological resources are uncovered during construction, all work must halt and an evaluation must be undertaken by a qualified archaeologist.

Policy EQ-3.33

Buildings with Historical Significance. The County Community Development Agency should require that buildings of

historical significance are preserved when new development is proposed.

Policy EQ-3.34

Consultation with Local Organizations. Development applications received for projects in areas identified as having potential to impact cultural and/or archeological impacts shall be forwarded to interested organizations and/or individuals for their review and comment.

D. OPEN SPACE AND RECREATION

Objective EQ-4. Open Space and Recreation. To establish criteria for the preservation of open space in each of the County's environmental corridors and to supply adequate recreational opportunities.

1. General Policies

Policy EQ-4.1

Provision of Facilities. Adequate parks, recreation facilities, and open space shall be provided. Appropriate public access shall be established.

Program EQ-4.1a

Open Space Acquisition. The following land acquisition techniques are employed by agencies in Marin County:

- outright purchase (full fee)
- installment purchase (no title change until last payment)
- purchase in advance of landbank with leaseback or resale of a portion as surplus
- excess condemnation with road, school, flood district, etc.
- purchase option to buy in future (first right of refusal)
- purchase right of entry plus floating trail easement
- purchase development rights for specific limited use
- require open space dedication as condition of approval
- trade or transfer of lands with other public/private bodies
- long-term lease (no purchase)
- gifts and voluntary land donations
- estate settlement, life estate, or in lieu of back taxes
- private or semi-public non-profit land trust
- voluntary agreements to permit scenic, recreational uses, and
- tax reduction contracts, agreements and write-offs.

Program EQ-4.1b

TDR's to Preserve Open Space. Consider a program which would enable development rights on lands identified as open space to be transferred to areas designated as high intensity

centers. If this approach is feasible and authorized by law, it should be applied only in designated areas which meet Countywide Plan standards for density increases (see the Community Development Element). The policy should <u>not</u> be applied wholesale throughout the City-Centered Corridor. Specific ratios of amounts or dollar values of open space to density bonuses to be allowed would be worked out. It may be possible for a developer to transfer development rights from selective open space areas in any part of the county, not just in the immediate community where a project is proposed.

Program EQ-4.1c

<u>Methods for Securing Open Space.</u> Other methods for securing open space include:

- cooperative purchase arrangements with local communities
- contributions from individuals and private organizations
- open space dedications of areas being developed
- scenic easements, and
- open space contracts similar to agricultural preserves under the Williamson Act.

When a public agency is unable to purchase or otherwise permanently secure an area identified for open space, a reasonable use must be permitted under zoning and other regulations. This might be, if the site is suitable, low density residential uses with a provision for clustering to preserve maximum open space.

Program EQ-4.1d

Regulation. Regulation can also be used to achieve the environmental policies of the Plan. The regulation list involves the use of governmental powers, principally police powers like zoning, to achieve public benefits in the private development of land, in areas of special environmental concern such as:

- natural hazards
- geologic risk zones (fault, bay mud, landslide)
- flooding risk zones (floodplain, stream buffer)
- fire risk zones (grass, dry brush, dead-end canyons)
- noise and flight path safety zones (airport, freeway)
- special recreation-visitor destination facilities (golf courses, hunting preserves, special event areas, etc.)
- agricultural and rural zones
- historic preservation areas (including archaeological sites)
- marine and wildlife resource conservation reserves
- view protection zones

- density transfer zones
- planned unit (cluster) zones
- scenic travel corridors
- Gion right of public access by historical precedence¹, and
- compensable zoning-freeze value with government guarantee of price difference.

Program EQ-4.1e

<u>Management</u>. The following management techniques are also means of implementing the recommendations set forth in the Countywide Plan:

- countywide management board to administer management programs for public and private open space,
- private landowner management plan,
- · agricultural/rural management plan,
- · coastal recreation and resource protection management plan, and
- multi-use management plan (recreation, marsh, wildlife, flood control, water, sewer, fire, school).

Policy EQ-4.2

Countywide Trail System. A countywide trail system shall be provided for recreational purposes and to give the public alternative transportation routes and methods and to lessen reliance on automobile use and new road construction, which may be detrimental to the environment.

Policy EQ-4.3

Accessibility of Park and Open Space Areas. When feasible, publicly owned park and open space areas should be made available to and usable by all segments of society, including people with disabilities.

Policy EQ-4.4

Categories of Open Space Preservation. The Countywide Plan identifies permanent preservation open space in the following categories:

Resource Production: Agricultural, timber, fishing areas, sand and gravel deposits.

Resource Preservation: Water edges, watersheds, tidal areas, wildlife reserves, marshes, mudflats, streams and creeks, oak woodlands.

The California Supreme Court has ruled (in the Gion decision) that public right of access is implied on beaches where the public use has occurred for a number of years under certain specified conditions.

Scenic: Greenbelts, separators, open land, forests, grasslands, viewsheds, trails.

Safety: Geologic risk, floodplains, noise areas, dikes, fire hazard areas.

Recreation: Public parks, trails, water sports areas, commercial recreation (golf courses, motels, stables).

Policy EQ-4.5

Criteria for Open Space Project Priority. The Marin County Open Space District has established the following criteria for project priority selections.

Criteria:

Projects must be identified in the Open Space Element of the Marin Countywide Plan or other adopted general or specific plans.

Projects should have the general support of the local jurisdictions within their sphere of influence.

Acquisition of lands should be undertaken only for projects of districtwide significance.

Priorities:

Ridge tops, shorelines, and streamside areas will be important because they play an obvious role in shaping the development of the county.

Areas under immediate threat of development or irreversible damage will be given high priority.

The visual or ecological importance of the area in the county will have significance.

Local contributions in cash, land areas, or land use regulations will be considered but are not essential.

Projects which are contiguous and which will extend their usefulness to existing open space preserved areas are important.

Attractive purchase considerations and conditions will be significant.

Adoption of the Open Space Element of the Countywide Plan by the jurisdiction involved will be significant, but not mandatory.

2. City-Centered Corridor Program

Program EQ-4.5a

Securing of Open Space to Assure Preservation. Because development pressures are strong, open space in the City-Centered Corridor has been and should continue to be secured (by purchase and other means) by the County Open Space District or other public agency in order to assure preservation (see Table EQ-8). The acquisition of remaining lands targeted for open space should be pursued as soon as funds become available. Remaining privately owned lands desirable for acquisition as open space are zoned with a low-density planned district designation to assure that environmental values are preserved when development takes place.

Program EQ-4.5b

<u>Community Separators.</u> These ridge and upland greenbelts separate and beautify Marin's communities. Some include hiking, biking, or horseback riding trails.

The following are examples of community separators:

- 1. Wolfback Ridge to Tennessee Valley, west of Highway 101, around to Oakwood Valley, preserves Marin's southern gateway. It connects the Golden Gate National Recreation Area with Sausalito and Marin City. Most of this area has been acquired as part of the GGNRA.
- 2. Ridge above Tamalpais Valley, along Panoramic from Tennessee Valley westward, includes trail links with Mount Tamalpais State Park. Portions are included in the GGNRA.
- 3. Tiburon Peninsula Ridge includes trails to several points along the bay. The Town of Tiburon has acquired portions of this ridge. The east side of the Tiburon Peninsula, now partially developed, from Keil Cove northward adjacent to Tiburon Ridge.
- 4. Northridge is one of the most important community separators in Marin, connecting Mill Valley, Corte Madera, and Larkspur with the Marin Municipal Water District lands to the west. Most of the ridge has been acquired through the joint efforts of the Open Space District, the cities, and private organizations.

Table EQ-8. Open Space Areas in the City-Centered Corridor

Area	1982 Plan Target Areas	Open Space Acres Acquired	% of Target Acquired	Remaining Target Acreage for 2005
Community Separators				
Wolfback Ridge	820	182.94	22	637.06
2. Tamalpais Ridge	640	96.53	15	543.47
3. Tiburon Ridge	1,740	833.82	48	906.18
4. Northridge	1,120	1,004.20	90	115.80
5. Corte Madera Watershed	1,750	1,408.00	80	342.00
6. Southern Heights Ridge	0	98.95		0.00
7. San Pedro Peninsula Hills	1,860	1,964.80	106	0.00
8. San Rafael/Sleepy Hollow Divide	3,890	1,119.70	29	2,770.30
9. Civic Center	130	129.51	100	0.49
10. Big Rock Ridge	6,400	4,512.00	71	1888.00
11. St. Vincent's	1,070	262.69	25	807.31
12. Pinheiro Ridge	970	108.90	11	861.10
13. Mount Burdell	1,400	1,452.80	104	0.00
Subtotal	21,790	13,174.84	60%	8,871.71
Water Edge Lowlands	7	7	77.77	, 3,3,2,,2
14. Richardson Bay	330	132.50	40	197.50
15. East Side of Tiburon Peninsula	80	72.10	90	7.90
16. Corte Madera Bayfront	390	416.41	107	0.00
17. San Rafael Bay	380	82.48	22	297.52
18. San Pedro Peninsula Shoreline	680	91.48	13	588.52
19. San Pablo Bayfront	1,850	788.40	43	1,061.60
20. Novato Creek/Black Point	790	1807.60	138	0.00
21. Petaluma River	950	195.73	21 .	754.27
Subtotal	5,450	2,866.70	53%	2,907.31
Stream and Creek Reserves				
22. Mill Valley Area Creeks	90	0.00	0	90.00
23. Corte Madera Creek	120	0.00	0	120.00
24. Las Gallinas Creek	110	0.00	0	110.00
25. Miller Creek, 101 to Big Rock	50	0.00	0	50.00
26. Arroyo San Jose	20	0.00	0	20.00
27. Novato and Warner Creeks	90	0.00	0	90.00
Subtotal	480	0.00	0	480.00
Safety Zones				
28. Gnoss Field	770	0.00	0	770.00
Total in City-Centered Corridor	28,490	16,041.54	56%	13,029.02

5. The rim of the Corte Madera Creek Watershed connects the Upper Ross Valley communities with the Marin Municipal Water District lands to the west. Most of the ridge has been acquired through the joint efforts of the Open Space District, the cities, and private organizations.

- 6. Southern Heights Ridge, dividing San Rafael and the Ross Valley, has already experienced extensive development. Because this is an important community backdrop, as much of the area as possible should be retained in a greenbelt through scenic easements.
- 7. San Pedro Peninsula Hills provide a backdrop for the Civic Center and offer panoramic views of the bay region. Most of this ridge has been acquired by the State, the Open Space District, the City of San Rafael, and local residents.
- 8. San Rafael-Sleepy Hollow Divide is an important separator where housing has already begun to intrude. There is extensive open space remaining in the western part, portions of which have been acquired by the Open Space District.
- 9. To the east, the remaining San Rafael-Sleepy Hollow Divide ridge should be preserved through easements and other methods.
- 10. Big Rock Ridge separates the Novato basin from the Lucas Valley-Marinwood communities, extends to Stafford Lake Park, and borders the College of Marin Indian Valley campus. Portions have been acquired by the Open Space District and local residents.
- 11. Hills east of Highway 101 near St. Vincent's School provide a continuous greenbelt system between Big Rock Ridge and San Pablo Bay. This space will separate new development in the Silveira-St. Vincent's area from other development to the north and south.
- 12. Pinheiro Ridge functions as a ridge and upland greenbelt/community separator between the Atherton community and the lands including and surrounding Gnoss Field.
- 13. Mount Burdell is the major landmark of North Marin, and 1,600 acres of its southern face have been acquired by the Open Space District as the Mt. Burdell Open Space Preserve. This preserve is a major component of a proposed greenbelt extending from the Rush Creek wetlands to Stafford Lake.

Program EQ-4.5c <u>Water Edge Lowlands</u>

14. Richardson Bay. These sections of shoreline should be acquired by County or city agencies for recreational use or resource

protection: Manzanita Green, connecting Marin City with the bay, and Strawberry Cove. Bothin Marsh (with the exception of the Martin Brothers Triangle), most of the Tiburon shoreline, and the head of Richardson Bay have been acquired.

- 15. Corte Madera Bay Front. Existing marshes should be preserved, and portions of the San Quentin area should be considered for public access to the bay. The Corte Madera Ecological Reserve has been established in this area and provides habitat for the endangered Clapper Rail.
- 16. San Rafael Bay. Land along the bay shore, the highest density residential area in the county, should be permanently secured for open space. The city has been actively acquiring a band of open space along the Bay.
- 17. San Pedro Peninsula shoreline should be acquired for wateroriented passive recreation from McNear's Beach north to Gallinas Creek. Major portions have been acquired as part of China Camp State Park.
- 18. San Pablo Bay Front, Gallinas Creek to Novato Creek, should be kept open to preserve the tidelands. Gallinas Creek provides habitat for threatened and endangered species, as well as migratory species. The creekside should be kept free of developments which would contribute to siltation and loss of navigational use in the stream channels. This area contains the County's McInnis Park.
- 19. Novato Creek to Black Point is an important tidal marsh which contains habitat for endangered and migratory species, and a valuable flood ponding area. Large areas have been acquired.
- 21. Petaluma River. Marshes, river bank areas and wildlife refuges should be preserved, in cooperation with Sonoma County. The State and Open Space District have acquired significant wetland areas between Rush Creek and Basalt Creek. A Coastal Conservancy grant will enable the County to prepare an enhancement plan for wetland areas and habitat.

Program EQ-4.5d Stream and Creek Reserves. Most stream buffers in the City-Centered Corridor have already been encroached upon by development so that in many cases it is no longer possible to attain the desirable buffer zone on each side. In any case, strict

controls and high environmental standards must be maintained in these zones.

Efforts to restore, enhance, and maintain natural vegetation and other habitat values should be encouraged.

- 21. Mill Valley Area Creeks. Local jurisdictions should provide adjacent parks and regulate development to protect streamside vegetation along Arroyo Corte Madera del Presidio, Old Mill, Cascade, Homestead, and Coyote Creeks.
- 22. Corte Madera Creek. Although much of this creek has already been lined with concrete, a landscaped bicycle path now extends from the Larkspur ferry terminal through the Ross Valley. The California Clapper Rail inhabits marshes along this creek.
- 23. Miller Creek from Highway 101 to Big Rock should provide a continuous natural strip through Marinwood and Lucas Valley. This should be assured as development plans are reviewed. The Marinwood Community Services District and the City of San Rafael have acquired a substantial portion of the land targeted for acquisition along Miller Creek.
- 24. Arroyo San Jose through Rafael Village and the Novato Golf and Country Club area should also be kept open through regulation.
- 25. Novato and Warner Creeks, among the few remaining natural streams in East Marin, should be kept as reserves as far to the west as possible, through acquisition of streamside development rights.

3. <u>Inland Rural Corridor Program</u>

Policy EQ-4.6

Preservation of Open Lands. A combination of agricultural zoning and contracts with landowners will continue to be used to preserve open land in the Inland Rural Corridor. In addition, government agencies and local groups will undertake special land management programs to protect streams, grasslands, and forests. Some acquisition by public agencies is needed to expand public parks and watershed (see Table EQ-9).

Program EQ-4.6a

<u>Public Open Space.</u> Marin Municipal Water District Lands include hiking, riding, and bicycle trails and limited recreation facilities such as scout camps, in addition to their primary function of providing watershed reserves and reservoirs. This

area has been expanded to the north around the Kent Lake Watershed to include the Carson Creek Drainage.

An area north of Samuel P. Taylor State Park including Devil's Gulch has been acquired by the federal government as part of a continuous park strip from the Golden Gate.

The Nicasio Reservoir area offers excellent potential for recreation uses. However, these uses may be limited due to the sensitivity of the watershed.

The County operates a park in the Stafford Lake area, which includes the lake owned by the North Marin Water District.

The Marin County Open Space District has acquired open space and trails, most notably on Loma Alta and the east-west ridgelines that define the San Geronimo Valley.

Program EQ-4.6b

Agricultural Areas. Agricultural preserve contracts, agricultural easements, zoning to a prevailing density of 60 acres, and implementation of Transfer of Development Rights programs should be the primary means used to preserve agricultural activities in these areas. Some limited recreational use, such as dude ranches, campgrounds, and hostels for bicycle travelers, should be permitted, to allow for reasonable use of private lands.

Program EQ-4.6c

Agricultural Zoning Study and Code Revisions. The County shall review and prepare comprehensive revisions to its primary agricultural zoning regulations for the purpose of creating a uniform approach to the preservation of agriculture. Such changes should include mandatory clustering provisions, appropriate development standards, and the inclusion of complementary non-agricultural uses.

Program EQ-4.6d

Agricultural Easements Program. The County shall continue its programs to obtain agricultural easements or to assist in the purchase of such easements by an appropriate agency or non-profit land trust.

Table EQ-9. Open Space Areas in the Inland Rural Corridor*

	Target Acres in 1973 and 1982	Acres Acquired as of 1988	% of Target Acreage Acquired	Remaining Target Acreage for 2005
Public Open Space				
Marin Municipal WaterDistrict	2,450	18,573	758	0
Samuel P. Taylor State Park	1,150	2,502	218	0
Nicasio Reservoir Park	1,850	1,683	91	0
Stafford Lake Park	2,920	5,088	174	0
Olompali State Park	0	678		0
Soulajule (MMWD)	0	192		0
Subtotal	8,370	28,717	342%	0
Conservation Zones: Stream Cours	se Buffers			
Estero Americano	530	0	0	530
Estero San Antonio & San				
Antonio Creek	910	0	0	910
Keys Creek	140	0	0	140
Chileno Creek, Laguna Lake, & San Antonio Creek	1,600	0	0	1,600
Walker Creek	1,000	0	0	1,000
Salmon Creek & Arroyo Sausal	870	0	0	870
Novato Creek	300	0	0	300
Halleck Creek	620	0	0	620
Nicasio Creek	610	0	0	610
Lagunitas Creek	400	0	0	400
San Geronimo Creek	450	0	0	450
Subtotal	7,430	0	0	7,430
Total	15,800	28,717	342%	7,430

^{*} Not Including Agricultural Areas

Note: Acreage in this table has been rounded.

Program EQ-4.6e

Stream Conservation Areas. Stream courses in the Inland Rural Corridor are especially prone to environmental damage. They will be carefully protected from pollution, bank erosion, and destruction of native plants, animals, and fish in reviews of any proposed activities affecting watersheds. These activities include agricultural uses, such as damming for holding ponds, pumping water, and disposing of cattle waste.

A conservation zone with a stream buffer consisting of the watercourse itself, and surrounding banks on both sides up to the high water mark and a strip of land extending 100 feet on either side of major streams is proposed. Development and use will be carefully controlled in accordance with environmental protection policies for conservation zones.

Program EQ-4.6f

Map Ridge and Upland Greenbelt Areas. Planning staff, in conjunction with the Marin County Open Space District should prepare a map which illustrates the ridge and upland greenbelt areas within the Inland Rural Corridor.

4. <u>Coastal Recreation Corridor Program</u>

Policy EQ-4.7

Identification of Open Space Preservation Areas. More detailed policies are included in the Marin County Local Coastal Program adopted by the Board of Supervisors and the Coastal Commission (see Table EQ-10).

Program EQ-4.7a Public Open Space

Golden Gate National Recreation Area. The National Park Service has established this major national park, generally including the southern tip of the county, extending east to the boundary of the City-Centered Corridor and north to Muir Beach and Samuel P. Taylor Park; and the Olema Valley, north to Sir Francis Drake Boulevard, excluding the town of Olema.

This configuration assures a continuous corridor of public land for recreation and open space along Marin's southern coast and adjacent to Point Reyes National Seashore. The Countywide Plan recommends that the area be retained in its natural state to the greatest extent possible, and that recreational uses are low intensity.

Mount Tamalpais State Park and Stinson Beach (GGNRA). The state park lands surrounding Muir Woods National Monument should continue to be used for fairly intensive public recreation.

Point Reyes National Seashore and Tomales Bay State Park. The National Park Service has completed a substantial amount of its planned land acquisition and is now developing interpretive visitor serving facilities at Point Reyes National Seashore. The Countywide Plan recommends that the National Seashore be retained in its natural condition to the greatest extent possible, and that it provide primarily low-intensity recreational uses such as hiking and wilderness education. High-intensity uses (such as picnicking) should only be provided in areas where the activity will not cause environmental damage. This policy is consistent with the Seashore Act (as amended in 1978) which requires these areas to be maintained in a "natural state." This legislation

essentially precludes activities such as public hunting from occurring within the Point Reyes National Seashore.

The park areas should be served by convenient public transportation. Ecologically fragile areas should remain relatively inaccessible. It is hoped that the National Park Service will establish interpretive resource centers before opening up environmentally sensitive areas and that it will plan and work toward the establishment of an internal transit system as soon as possible.

Bolinas Lagoon, formerly a County Park, is now managed by the Marin County Open Space District as an Open Space Preserve. The District is currently evaluating its management policies in order to develop a management program for the lagoon that will balance public use with preservation of the lagoon's fragile resources. The District is also cooperating with the Bolinas Lagoon Technical Advisory Committee in an effort to solve problems associated with the high volume of sediments that have entered and remained in the lagoon over the past 20 years.

Program EQ-4.7b

Agricultural Areas. Agricultural zoning and contracts should be used to help preserve and encourage the retention of these activities and preserve portions of this corridor in their present dairying and ranching uses, as recommended for the Inland Rural Corridor. The Marin County Local Coastal Program designates these lands as Agricultural Production Zones, to strengthen and encourage exclusive agricultural use.

Land along the San Andreas Rift Zone is subject to severe impacts from earthquakes. No concentrated or hazardous uses will be permitted here, including schools, other institutions, high-density housing, or reservoirs. The inclusion of much of this zone in the Golden Gate National Recreation Area will prevent development along a large extent of the fault.

Table EQ-10. Existing and Proposed Open Space in the Coastal Recreation Corridor*

	1973 & 1982 Target Acres	Acres Acquired as of 1988	% of Target Acquired	Remaining Target Acreage for 2005
Public Open Space				
Golden Gate National Recreation Area	13,910	25,587	184%	0
Conservation Zones				
Bolinas Bay Cliffs, Audubon Canyon	3,470	1,050	30%	2,420
Duxbury Reef	1,160	1,160	100%	0
Cliffs at Bodega, Mouth of Estero San Antonio	2,010	0	0%	2,010
Tomales Bay Front, Walker Creek Mouth	4,570	0	0%	4,570
San Andreas Rift Zone .	3,140	3,140	100%	0
Olema Creek	140	140	100%	0
Subtotal	14,490	5,490	38%	9,000
Total	28,400	31,077	109%	9,000

^{*}Not including agricultural area.

Table EQ-11. Types of Recreation Facilities in Marin County

Responsible Agency	City-Centered Corridor	Inland Rural Corridor	Coastal Recreation
Federal		Muir Woods National Monument Golden Gate National Recreation Area: beaches, camping trails, outdoor education, wilderness preservation, picnicking.	Point Reyes National Seashore Golden Gate National Recreation Area Stinson Beach
State	Angel Island Park: boating, trails, picknicking, beaches, outdoor education. China Camp: camping, trails,	Samuel P. Taylor and Mt. Tam Parks: camping, trails, picknicking. Olompali Park cultural history;	
County Parks Open Space & Cultural Commission	picknicking. Beach parks, boat launch, upland parks, golf, tot lots, bike paths, tennis, swimming pool, wetland and botanical reserves, trails.	hiking. Trails, stream reserves, reservoir parks: fishing, picknicking.	Beach parks, marinas, trails, wetland botanical reserves.
County Open Space District	Mt. Burdell, Northridge, Terra Linda/Sleepy Hollow Divide, Deer Island, San Pedro Mtn., Big Rock Ridge - Cascade Canyon. Open Space Reserves with low impact recreation use.	Roy's Redwoods, Maurice Thorner, Pine Mountain, Indian Tree, Loma Alta Preserves: low impact recreational uses.	Bolinas Lagoon: low impact water related uses.
Water District Lands	Trails, fishing, picknicking, bike paths.	Watershed reserves: camping.	
Local: Cities and Recreation Districts.	Community parks, playgrounds, tot lots, swimming pools, indoor facilities, athletic fields, golf, tennis, bike paths, historic sites.		
Commercial Firms	Boating, swimming, golf, sports arenas, indoor recreational, tourist facilities, stables.	Tourist facilities, stables.	Tourist facilities, boating, stables.

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